

# **QUALIFIED PARTS LIST DIRECTORY**

RADIATION EFFECTS, PARTS, PACKAGING, AND ASSEMBLY  
TECHNOLOGIES OFFICE CODE 561  
NASA/GODDARD SPACE FLIGHT CENTER  
GREENBELT, MARYLAND 20771-0001

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# REVISION HISTORY

| Date     | Revision Notice | Originator     |
|----------|-----------------|----------------|
| 03/06/09 | A-153           | Javad Shockri  |
| 05/26/09 | A-157           | Javad Shockri  |
| 07/16/09 | A-161           | Javad Shockri  |
| 08/28/09 | A-163           | Javad Shockri  |
| 07/30/10 | A-168           | Javad Shockri  |
| 07/13/11 | A-171           | Javad Shockri  |
| 08/05/11 | A-173           | Javad Shockri  |
| 07/31/12 | A-178           | Javad Shockri  |
| 04/18/13 | A-182           | Thom Perry     |
| 06/25/13 | A-186           | Thom Perry     |
| 12/29/14 | A-192           | Thom Perry     |
| 01/29/15 | A-193           | Javad Shockri  |
| 06/19/15 | A-196           | Thom Perry     |
| 08/24/15 | A-198           | Javad Shockri  |
| 9/24/15  | A-199           | Thom Perry     |
| 2/11/16  | A-201           | Javad Shockri  |
| 2/17/16  | A-202           | Bruce Meinhold |
| 3/10/16  | A-204           | Javad Shockri  |
| 4/20/16  | A-205           | Javad Shockri  |
| 09/08/16 | A-206           | Javad Shockri  |
| 01/27/17 | A-210           | Javad Shockri  |
| 01/03/18 | A-215           | Eric Haggquist |
| 08/20/19 | A-221           | Eric Haggquist |
| 10/05/23 | A-224           | Bruce Meinhold |
| 09/08/25 | A-227           | Jay Brusse     |
|          |                 |                |
|          |                 |                |
|          |                 |                |
|          |                 |                |
|          |                 |                |

## **1.0 PURPOSE**

Goddard Space Flight Center (GSFC) has prepared this Qualified Parts List Directory (QPLD) for procurement of products governed by the NASA/GSFC specifications cited herein. These specifications are prepared whenever an acceptable part for space cannot be procured to military or other government-controlled specifications. Listing of products in this QPLD is contingent on satisfying the qualification requirements in the latest issue of the applicable GSFC procurement specification.

Listing of a product is not intended to and does not connote endorsement of the product by NASA. This list is subject to change without notice; revision or amendment of this list will be made as necessary. The listing of a product does not release the supplier from compliance with the specification's requirements.

## **2.0 PREPARING ACTIVITY**

The Qualified Parts List Directory (QPLD) is prepared by:

Radiation Effects, Parts, Packaging, and Assembly Technologies Office Code 561  
NASA/Goddard Space Flight Center  
Greenbelt, MD 20771-0001

E-Mail: [gsfc-qpld-admin@mail.nasa.gov](mailto:gsfc-qpld-admin@mail.nasa.gov)

## **3.0 RETENTION OF QUALIFICATION**

Continued listing of products in this QPLD is contingent upon satisfying the retention of qualification requirements as specified in the applicable GSFC procurement specification.

## **4.0 WAIVERS**

When there are no available products listed against any NASA/GSFC specification in the QPLD, the qualification requirements of the specification may be waived only by NASA/GSFC. When qualification is waived, the procuring agency shall invoke first article inspection that shall consist of performing all qualification tests in the applicable GSFC procurement specification. A copy of the test data shall be forwarded to the QPLD Administrator as consideration for future listing in this QPLD.

## **5.0 PARTS LISTING**

Parts are listed by commodity type, NASA/GSFC Part Number, Manufacturer's Similar Part Number, NASA/GSFC Specification, Test Plan Reference Number, and Manufacturer's Name. Details concerning Manufacturers (Addresses, Telephone Numbers, and Commercial and Government Entity (CAGE) Codes) are listed in Section 6.0 of the QPLD. Contact the QPLD Administrator for recommended Manufacturer points of contact. Do not use the manufacturer's similar part number for item acquisition. Items acquired to this number may not satisfy the performance requirements of the NASA/GSFC drawing.

## 5.1 CAPACITORS

| GSFC <a href="#">S-311-P-829</a> Capacitor, Ceramic, Multilayer Chip, Space Applications |                          |             |                                           |
|------------------------------------------------------------------------------------------|--------------------------|-------------|-------------------------------------------|
| Procurement PIN                                                                          | Manufacturer Similar PIN | Test Report | Manufacturer                              |
| G311P829*****                                                                            | SR Series                | QPDSIS-123  | <a href="#">Presidio Components, Inc.</a> |

| GSFC <a href="#">S-311-P-838</a> Capacitor, Ceramic, Multilayer Chip, Base-Metal Electrodes, Space Applications |                                                |             |                             |
|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------|-------------|-----------------------------|
| Procurement PIN                                                                                                 | Manufacturer Similar PIN                       | Test Report | Manufacturer                |
| G311P838*****                                                                                                   | Custom manufactured to the GSFC specification. | 122014      | <a href="#">Kyocera-AVX</a> |

## 5.2 CONNECTORS

| GSFC <a href="#">S-311-P-10</a> , Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use |                                             |               |                                       |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------|---------------------------------------|
| Procurement PIN                                                                                                                        | Manufacturer Similar PIN                    | Test Report   | Manufacturer                          |
| 311P10-1P-B-12                                                                                                                         | DEM-9P-NMB-K52                              | QRN 94008     | <a href="#">ITT CANNON</a>            |
| 311P10-1P-B-12                                                                                                                         | SND9M2000G-1082.24                          | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-1P-B-12                                                                                                                         | C115372-3000                                | 24308-3535-12 | <a href="#">C&amp;K CONNECT</a>       |
| 311P10-1P-B-15                                                                                                                         | DEM-9P-NMB-K52                              | QRN 94008     | ITT CANNON                            |
| 311P10-1P-B-15                                                                                                                         | SND9M20200G-1082.24                         | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-1P-C-12                                                                                                                         | DEM-9P-NMC-K52                              | QRN 94008     | ITT CANNON                            |
| 311P10-1P-C-12                                                                                                                         | SND9M2000G-1082.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-1P-C-15                                                                                                                         | DEM-9P-NMC-K52                              | QRN 94008     | ITT CANNON                            |
| 311P10-1P-C-15                                                                                                                         | SND9M20200G-1082.24                         | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311p10-1S-B-12                                                                                                                         | DEM-9S-NMB-K52                              | QRN 94008     | ITT CANNON                            |
| 311P10-1S-B-12                                                                                                                         | SND9F2000G-1082.24<br>SND9S2000G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-1S-B-12                                                                                                                         | C115372-3001                                | 24308-3535-12 | C&K CONNECT                           |
| 311P10-1S-B-15                                                                                                                         | DEM-9S-NMB-K52                              | QRN 94008     | ITT CANNON                            |
| 311P10-1S-B-15                                                                                                                         | SND9F20200G-1082.24                         | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-1S-C-12                                                                                                                         | DEM-9S-NMC-K52                              | QRN 94008     | ITT CANNON                            |
| 311P10-1S-C-12                                                                                                                         | SND9F2000G-1082.24<br>SND9S2000G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-1S-C-15                                                                                                                         | DEM-9S-NMC-K52                              | QRN 94008     | ITT CANNON                            |
| 311P10-1S-C-15                                                                                                                         | SND9F20200G-1082.24                         | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-2P-B-12                                                                                                                         | SND15M2000G-1082.24                         | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-2P-B-12                                                                                                                         | C115372-3002                                | 24308-3535-12 | C&K CONNECT                           |
| 311P10-2P-B-15                                                                                                                         | DAM-15P-NMB-K52                             | QRN 94008     | ITT CANNON                            |
| 311P10-2P-B-15                                                                                                                         | SND15M20200G-1082.24                        | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-2P-C-12                                                                                                                         | DAM-15P-NMC-K52                             | QRN 94008     | ITT CANNON                            |
| 311P10-2P-C-12                                                                                                                         | SND15M2000G-182.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-2P-C-15                                                                                                                         | DAM-15P-NMC-K52                             | QRN 94008     | ITT CANNON                            |
| 311P10-2S-B-12                                                                                                                         | DAM-15S-NMB-K52                             | QRN 94008     | ITT CANNON                            |

| GSFC <a href="#">S-311-P-10</a> , Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use |                                               |               |                                       |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------|---------------------------------------|
| Procurement PIN                                                                                                                        | Manufacturer Similar PIN                      | Test Report   | Manufacturer                          |
| 311P10-2S-B-12                                                                                                                         | SND15F2000G-1082.24<br>SND15S2000G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-2S-B-12                                                                                                                         | C115372-3003                                  | 24308-3535-12 | C&K CONNECT                           |
| 311P10-2S-B-15                                                                                                                         | DAM-15S-NMB-K52                               | QRN 94008     | <a href="#">ITT CANNON</a>            |
| 311P10-2S-B-15                                                                                                                         | SND15F20200G-1082.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-2S-C-12                                                                                                                         | DAM-15S-NMC-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-2S-C-12                                                                                                                         | SND15F2000G-1082.24<br>SND15S2000G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-2S-C-12                                                                                                                         | SND15M20200G-1082.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-2S-C-15                                                                                                                         | DAM-15S-NMC-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-2S-C-15                                                                                                                         | SND15F20200G-1082.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-3P-B-12                                                                                                                         | DBM-25P-NMB-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-3P-B-12                                                                                                                         | SND25M2000G-1082.24                           | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-3P-B-12                                                                                                                         | C115372-3004                                  | 24308-3535-12 | <a href="#">C&amp;K CONNECT</a>       |
| 311P10-3P-B-15                                                                                                                         | DBM-25P-NMB-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-3P-B-15                                                                                                                         | SND25M20200G-1082.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-3P-C-12                                                                                                                         | DBM-25P-NMC-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-3P-C-12                                                                                                                         | SND25M2000G-1082.24                           | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-3P-C-15                                                                                                                         | DBM-25P-NMC-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-3P-C-15                                                                                                                         | SND25M20200G-1082.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-3S-B-12                                                                                                                         | DBM-25S-NMB-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-3S-B-12                                                                                                                         | SND25F2000G-1082.24<br>SND25S2000G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-3S-B-12                                                                                                                         | C115372-3005                                  | 24308-3535-12 | C&K CONNECT                           |
| 311P10-3S-B-15                                                                                                                         | DBM-25S-NMB-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-3S-B-15                                                                                                                         | SND25F20200G-1082.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-3S-C-12                                                                                                                         | DBM-26S-NMC-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-3S-C-12                                                                                                                         | SND25F2000G-1082.24<br>SND25S2000G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-3S-C-15                                                                                                                         | DBM-25S-NMC-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-3S-C-15                                                                                                                         | SND25F20200G-1082.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-4P-B-12                                                                                                                         | DCM-37P-NMB-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-4P-B-12                                                                                                                         | SND37M2000G-1082.24                           | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-4P-B-12                                                                                                                         | C115372-3006                                  | 24308-3535-12 | C&K CONNECT                           |
| 311P10-4P-B-15                                                                                                                         | DCM-37P-NMB-K52                               | QRN 94008     | ITT CANNON                            |
| 311P10-4P-B-15                                                                                                                         | SND37M20200G-1082.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-4P-C-12                                                                                                                         | DCM-37P-NMC-K52                               | QRN 94008     | ITT CANNON                            |

| GSFC <a href="#">S-311-P-10</a> , Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use |                                                 |               |                                       |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------|---------------------------------------|
| Procurement PIN                                                                                                                        | Manufacturer Similar PIN                        | Test Report   | Manufacturer                          |
| 311P10-4P-C-12                                                                                                                         | SND37M2000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-4P-C-15                                                                                                                         | DCM-37P-NMC-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-4P-C-15                                                                                                                         | SND37M2000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-4S-B-12                                                                                                                         | DCM-37S-NMB-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-4S-B-12                                                                                                                         | SND37F2000G-1082.24 1/                          | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-4S-B-12                                                                                                                         | C115372-3007                                    | 24308-3535-12 | C&K CONNECT                           |
| 311P10-4S-B-15                                                                                                                         | DCM-37S-NMB-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-4S-B-15                                                                                                                         | SND37F20200G-1082.24<br>SND37S20200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-4S-C-12                                                                                                                         | DCM-37S-NMC-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-4S-C-12                                                                                                                         | SND37M20200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-4S-C-15                                                                                                                         | DCM-37S-NMC-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-4S-C-15                                                                                                                         | SND37F20200G-1082.24<br>SND37S20200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-5P-B-12                                                                                                                         | DDM-50P-NMB-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-5P-B-12                                                                                                                         | SND50M2000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-5P-B-12                                                                                                                         | C115372-3008                                    | 24308-3535-12 | <a href="#">C&amp;K CONNECT</a>       |
| 311P10-5P-B-15                                                                                                                         | DDM-50P-NMB-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-5P-B-15                                                                                                                         | SND50M20200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-5P-C-12                                                                                                                         | DDM-50P-NMC-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-5P-C-12                                                                                                                         | SND50M2000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-5P-C-15                                                                                                                         | DDM-50P-NMC-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-5P-C-15                                                                                                                         | SND50M20200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-5S-B-12                                                                                                                         | DDM-50S-NMB-K52                                 | QRN 94008     | ITT CANNON                            |
| /311P10-5S-B-12                                                                                                                        | SND50F2000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-5S-B-12                                                                                                                         | C115372-3009                                    | 24308-3535-12 | C&K CONNECT                           |
| 311P10-5S-B-15                                                                                                                         | DDM-50S-NMB-K52                                 | QRN 94008     | <a href="#">ITT CANNON</a>            |
| 311P10-5S-B-15                                                                                                                         | SND50F20200G-1082.24                            | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-5S-C-12                                                                                                                         | DDM-50S-NMC-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-5S-C-12                                                                                                                         | SND50F2000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-5S-C-15                                                                                                                         | DDM-50S-NMC-K52                                 | QRN 94008     | ITT CANNON                            |
| 311P10-5S-C-15                                                                                                                         | SND50F20200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-6P-B-12                                                                                                                         | DEM-5W1P-NMB-K52                                | QRN 94008     | ITT CANNON                            |
| 311P10-6P-B-12                                                                                                                         | SCBM5W1M2000G-1082.24                           | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P10-6P-B-15                                                                                                                         | DEM-5W1P-NMB-K52                                | QRN 94008     | ITT CANNON                            |
| 311P10-6P-B-15                                                                                                                         | SCBM5W1M20200G-1082.24                          | QRN 94007     | POSITRONIC INDUSTRIES                 |

| GSFC <a href="#">S-311-P-10</a> , Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use |                                                     |             |                                       |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------|---------------------------------------|
| Procurement PIN                                                                                                                        | Manufacturer Similar PIN                            | Test Report | Manufacturer                          |
| 311P10-6P-C-12                                                                                                                         | DEM-5W1P-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-6P-C-12                                                                                                                         | SCBM5W1M2000G-1082.24                               | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-6P-C-15                                                                                                                         | DEM-5W1P-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-6P-C-15                                                                                                                         | SCBM5W1M20200G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-6S-B-12                                                                                                                         | DEM-5W1S-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-6S-B-12                                                                                                                         | SCBM5W1F200G-1082.24                                | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-6S-B-15                                                                                                                         | DEM-5W1S-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-6S-B-15                                                                                                                         | SCBM5W1F202000G-1082.24                             | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-6S-C-12                                                                                                                         | DEM-5W1S-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-6S-C-12                                                                                                                         | SCBM5W1F2000G-1082.24                               | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-6S-C-15                                                                                                                         | DEM-5W1S-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-6S-C-15                                                                                                                         | SCBM5W1F20200G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-7P-B-12                                                                                                                         | DAM-3W3P-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-7P-B-12                                                                                                                         | SCBM3W3M0000G-1082.24                               | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-7P-B-15                                                                                                                         | DAM-3W3P-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-7P-B-15                                                                                                                         | SCBM3W3M00200G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-7P-C-12                                                                                                                         | DAM-3W3P-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-7P-C-12                                                                                                                         | SCBM3W3M0000G-1082.24                               | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-7P-C-15                                                                                                                         | DAM-3W3P-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-7P-C-15                                                                                                                         | SCBM3W3M00200G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-7S-B-12                                                                                                                         | DAM-3W3S-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-7S-B-12                                                                                                                         | SCBM3WF0000G-1082.24<br>SCBM3WS0000G-1082.24 1/     | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-7S-B-15                                                                                                                         | DAM-3W3S-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-7S-B-15                                                                                                                         | SCBM3WF00200G-1082.24<br>SCBM3WS00200G-1082.24 1/   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-7S-C-12                                                                                                                         | DAM-3W3S-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-7S-C-12                                                                                                                         | SCBM3W3F0000G-1082.24<br>SCBM3W3S0000G-1082.24 1/   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-7S-C-15                                                                                                                         | DAM-3W3S-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-7S-C-15                                                                                                                         | SCBM3W3F00200G-1082.24<br>SCBM3W3S00200G-1082.24 1/ | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-8P-B-12                                                                                                                         | DAM-7W2P-NMB-K52                                    | QRN 94008   | <a href="#">ITT CANNON</a>            |
| 311P10-8P-B-12                                                                                                                         | SCBM7W2M2000G-1082.24                               | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-8P-B-15                                                                                                                         | DAM-7W2P-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-8P-B-15                                                                                                                         | SCBM7W2M20200G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |

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| Procurement PIN                                                                                                                        | Manufacturer Similar PIN | Test Report | Manufacturer                          |
| 311P10-8P-C-12                                                                                                                         | DAM-7W2P-NMC-K52         | QRN 94008   | ITT CANNON                            |
| 311P10-8P-C-12                                                                                                                         | SCBM7W2M2000G-1082.24    | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-8P-C-15                                                                                                                         | DAM-7W2P-NMC-K52         | QRN 94008   | ITT CANNON                            |
| 311P10-8S-B-12                                                                                                                         | DAM-7W2S-NMB-K52         | QRN 94008   | ITT CANNON                            |
| 311P10-8S-B-12                                                                                                                         | SCBM7W2F2000G-1082.24    | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-8S-B-15                                                                                                                         | DAM-7W2S-NMB-K52         | QRN 94008   | ITT CANNON                            |
| 311P10-8S-B-15                                                                                                                         | SCBM7W2F20200G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-8S-C-12                                                                                                                         | DAM-7W2S-NMC-K52         | QRN 94008   | ITT CANNON                            |
| 311P10-8S-C-12                                                                                                                         | SCBM7W2M20200G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-8S-C-15                                                                                                                         | DAM-7W2S-NMC-K52         | QRN 94008   | ITT CANNON                            |
| 311P10-8S-C-15                                                                                                                         | SCBM7W2F2000G-1082.24    | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-93-C-12                                                                                                                         | SCBM11W1M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-93-C-15                                                                                                                         | SCBM11W1F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-9P-B-12                                                                                                                         | DAM-11W1P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-9P-B-12                                                                                                                         | SCBM11W1M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-9P-B-15                                                                                                                         | DAM-11W1P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-9P-B-15                                                                                                                         | SCBM11W1M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-9P-C-12                                                                                                                         | DAM-11W1P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-9P-C-12                                                                                                                         | SCBM7W2F20200G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-9P-C-15                                                                                                                         | DAM-11W1P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-9P-C-15                                                                                                                         | SCBM11W1M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-9S-B-12                                                                                                                         | DAM-11W1S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-9S-B-12                                                                                                                         | SCBM1121F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-9S-B-15                                                                                                                         | DAM-11W1S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-9S-B-15                                                                                                                         | SCBM11WF20200G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-9S-C-12                                                                                                                         | DAM-11W1S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-9S-C-15                                                                                                                         | DAM-11W1S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-10P-B-12                                                                                                                        | DBM-5W5P-NMB-K52         | QRN 94008   | ITT CANNON                            |
| 311P10-10P-B-12                                                                                                                        | SCBM5W5M0000G-1082.24    | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-10P-B-15                                                                                                                        | DBM-5W5P-NMB-K52         | QRN 94008   | ITT CANNON                            |
| 311P10-10P-B-15                                                                                                                        | SCBM5W5M00200G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-10P-C-12                                                                                                                        | DBM-5W5P-NMC-K52         | QRN 94008   | ITT CANNON                            |
| 311P10-10P-C-12                                                                                                                        | SCBM5W5M0000G-1082.24    | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-10P-C-15                                                                                                                        | DBM-5W5P-NMC-K52         | QRN 94008   | <a href="#">ITT CANNON</a>            |
| 311P10-10P-C-15                                                                                                                        | SCBM5W5M00200G-1082.24   | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-10S-B-12                                                                                                                        | DBM-5W5S-NMB-K52         | QRN 94008   | ITT CANNON                            |

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| Procurement PIN                                                                                                                        | Manufacturer Similar PIN                            | Test Report | Manufacturer                          |
| 311P10-10S-B-12                                                                                                                        | SCBM5WF0000G-1082.24<br>SCBM5WS0000G-1082.24 1/     | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-10S-B-15                                                                                                                        | DBM-5W5S-NMB-K52                                    | QRN 94008   | <a href="#">ITT CANNON</a>            |
| 311P10-10S-B-15                                                                                                                        | SCBM5W5F00200G-1082.24<br>SCBM5W5S00200G-1082.24 1/ | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-10S-C-12                                                                                                                        | DBM-5W5S-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-10S-C-12                                                                                                                        | SCBM5W5F0000G-1082.24                               | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-10S-C-15                                                                                                                        | DBM-5W5S-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-10S-C-15                                                                                                                        | SCBM5W5F00200G-1082.24<br>SCBM5W5S00200G-1082.24 1/ | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-11P-B-12                                                                                                                        | DBM-9W4P-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-11P-B-12                                                                                                                        | SCBM9W4M2000G-1082.24                               | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-11P-B-15                                                                                                                        | DBM-9W4P-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-11P-B-15                                                                                                                        | SCBM9W4M20200G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-11P-C-12                                                                                                                        | DBM-9W4P-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-11P-C-15                                                                                                                        | DBM-9W4P-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-11S-B-12                                                                                                                        | DBM-9W4S-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-11S-B-12                                                                                                                        | SCBM9W4F2000G-1082.24                               | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-11S-B-15                                                                                                                        | DBM-9W4S-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-11S-B-15                                                                                                                        | SCBM9W4F20200G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-11S-C-12                                                                                                                        | DBM-9W4S-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-11S-C-15                                                                                                                        | DBM-9W4S-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-12P-B-12                                                                                                                        | DBM-13W3P-NMB-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-12P-B-12                                                                                                                        | SCBM13W3M2000G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-12P-B-15                                                                                                                        | DBM-13W3P-NMB-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-12P-B-15                                                                                                                        | SCBM13W3M20200G-1082.24                             | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-12P-C-12                                                                                                                        | DBM-13W3P-NMC-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-12P-C-12                                                                                                                        | SCBM9W4M2000G-1082.24                               | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-12P-C-15                                                                                                                        | DBM-13W3P-NMC-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-12P-C-15                                                                                                                        | SCBM9W4M20200G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-12S-B-12                                                                                                                        | DBM-13W3S-NMB-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-12S-B-12                                                                                                                        | SCBM13W3F2000G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-12S-B-15                                                                                                                        | DBM-13W3S-NMB-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-12S-B-15                                                                                                                        | SCBM13W3F20200G-1082.24                             | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-12S-C-12                                                                                                                        | DBM-13W3S-NMC-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-12S-C-12                                                                                                                        | SCBM13W3F2000G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-12S-C-15                                                                                                                        | DBM-13W3S-NMC-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-12S-C-15                                                                                                                        | SCBM13W3F20200G-1082.24                             | QRN 94007   | POSITRONIC INDUSTRIES                 |

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|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|---------------------------------------|
| Procurement PIN                                                                                                                        | Manufacturer Similar PIN | Test Report | Manufacturer                          |
| 311P10-13P-B-12                                                                                                                        | DBM-17W2P-NMB-K52        | QRN 94008   | <a href="#">ITT CANNON</a>            |
| 311P10-13P-B-12                                                                                                                        | SCBM17W2M2000G-1082.24   | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-13P-B-15                                                                                                                        | DBM-17W2P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-13P-B-15                                                                                                                        | SCBM17W2M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-13P-C-12                                                                                                                        | DBM-17W3P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-13P-C-12                                                                                                                        | SCBM17W2M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-13P-C-15                                                                                                                        | DBM-17W2P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-13P-C-15                                                                                                                        | SCBM17W2M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-13S-B-12                                                                                                                        | DBM-17W2S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-13S-B-12                                                                                                                        | SCBM17W2F000G-1082.24    | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-13S-B-15                                                                                                                        | DBM-17W2S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-13S-B-15                                                                                                                        | SCBM17W2F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-13S-C-12                                                                                                                        | DBM-13W3S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-13S-C-12                                                                                                                        | SCBM17W2F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-13S-C-15                                                                                                                        | DBM-17W2S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-13S-C-15                                                                                                                        | SCBM17W2F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-14P-B-12                                                                                                                        | DBM-21W1P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-14P-B-12                                                                                                                        | SCBM21W1M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-14P-B-15                                                                                                                        | DBM-21W1P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-14P-B-15                                                                                                                        | SCBM21W1M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-14P-C-12                                                                                                                        | DBM-21W1P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-14P-C-12                                                                                                                        | SCBM21W1M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-14P-C-15                                                                                                                        | DBM-21W1P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-14P-C-15                                                                                                                        | SCBM21W1M20200/G-1082.24 | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-14S-B-12                                                                                                                        | DBM-21W1S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-14S-B-12                                                                                                                        | SCBM21W1F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-14S-B-15                                                                                                                        | DBM-21W1S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-14S-B-15                                                                                                                        | SCBM21W1F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-14S-C-12                                                                                                                        | DBM-21W1S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-14S-C-12                                                                                                                        | SCBM21W1F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-14S-C-15                                                                                                                        | DBM-21W1S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-14S-C-15                                                                                                                        | SCBM21W1F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-15P-B-12                                                                                                                        | DCM-8W8P-NMB-K52         | QRN 94008   | ITT CANNON                            |
| 311P10-15P-B-12                                                                                                                        | SCBM8W8M0000G-1082.24    | QRN 94007   | POSITRONIC INDUSTRIES                 |

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| Procurement PIN                                                                                                                        | Manufacturer Similar PIN                            | Test Report | Manufacturer                          |
| 311P10-15P-B-15                                                                                                                        | DCM-8W8P-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-15P-B-15                                                                                                                        | SCBM8W8M00200G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-15P-C-12                                                                                                                        | DCM-8W8P-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-15P-C-12                                                                                                                        | SCBM8WM0000G-1082.24                                | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-15P-C-15                                                                                                                        | DCM-8W8P-NMC-K52                                    | QRN 94008   | <a href="#">ITT CANNON</a>            |
| 311P10-15P-C-15                                                                                                                        | SCBM8W8M00200G-1082.24                              | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-15S-B-12                                                                                                                        | DCM-8W8S-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-15S-B-12                                                                                                                        | SCBM8W8F0000G-1082.24<br>SCBM8W8S0000G-1082.24 1/   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-15S-B-15                                                                                                                        | DCM-8W8S-NMB-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-15S-B-15                                                                                                                        | SCBM8W8F00200G-1082.24<br>SCBM8W8S00200G-1082.24 1/ | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-15S-C-12                                                                                                                        | DCM-8W8S-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-15S-C-12                                                                                                                        | SCBM1W1F0000G-1082.24                               | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-15S-C-15                                                                                                                        | DCM-8W8S-NMC-K52                                    | QRN 94008   | ITT CANNON                            |
| 311P10-15S-C-15                                                                                                                        | SCBM8W8F00200G-1082.24<br>SCBM8W8S00200G-1082.24 1/ | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-16P-B-12                                                                                                                        | DCM-13W6P-NMB-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-16P-B-12                                                                                                                        | SCBM13W6M2000G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-16P-B-15                                                                                                                        | DCM-13W6P-NMB-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-16P-B-15                                                                                                                        | SCBM13W6M20200G-1082.24                             | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-16P-C-12                                                                                                                        | DCM-13W6P-NMC-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-16P-C-12                                                                                                                        | SCBM13W6M2000G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-16P-C-15                                                                                                                        | DCM-13W6P-NMC-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-16P-C-15                                                                                                                        | SCBM13W6M20200G-1082.24                             | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-16S-B-12                                                                                                                        | DCM-13W6S-NMB-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-16S-B-12                                                                                                                        | SCBM13W6F2000G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-16S-B-15                                                                                                                        | DCM-13W6S-NMB-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-16S-B-15                                                                                                                        | SCBM13W6F20200G-1082.24                             | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-16S-C-12                                                                                                                        | DCM-13W6S-NMC-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-16S-C-12                                                                                                                        | SCBM13W6F2000G-1082.24                              | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-16S-C-15                                                                                                                        | DCM-13W6S-NMC-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-16S-C-15                                                                                                                        | SCBM13W6F20200G-1082.24                             | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-17P-B-12                                                                                                                        | DCM-17W5P-NMB-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-17P-B-12                                                                                                                        | SCBM17W5M2000G-1082.24g                             | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-17P-B-15                                                                                                                        | DCM-17W5P-NMB-K52                                   | QRN 94008   | ITT CANNON                            |
| 311P10-17P-B-15                                                                                                                        | SCBM17W5M20200G-1082.24                             | QRN 94007   | POSITRONIC INDUSTRIES                 |

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| Procurement PIN                                                                                                                        | Manufacturer Similar PIN | Test Report | Manufacturer                          |
| 311P10-17P-C-12                                                                                                                        | DCM-17W5P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-17P-C-12                                                                                                                        | SCBM17W5M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-17P-C-15                                                                                                                        | DCM-17W5P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-17P-C-15                                                                                                                        | SCBM17W5M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-17S-B-12                                                                                                                        | DCM-17W5S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-17S-B-12                                                                                                                        | SCBM17W5F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-17S-B-15                                                                                                                        | DCM-17W5S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-17S-B-15                                                                                                                        | SCBM17W5F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-17S-C-12                                                                                                                        | DCM-17W5S-NMC-K52        | QRN 94008   | <a href="#">ITT CANNON</a>            |
| 311P10-17S-C-12                                                                                                                        | SCBM17W5F2000G-1082.24   | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-17S-C-15                                                                                                                        | DCM-17W5S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-17S-C-15                                                                                                                        | SCBM17W5F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-18P-B-12                                                                                                                        | DCM-21WA4P-NMB-K52       | QRN 94008   | ITT CANNON                            |
| 311P10-18P-B-12                                                                                                                        | SCBM21WA4M200G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-18P-B-15                                                                                                                        | DCM-21WA4P-NMB-K52       | QRN 94008   | ITT CANNON                            |
| 311P10-18P-B-15                                                                                                                        | SCBM21WA4M20200G-1082.24 | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-18P-C-12                                                                                                                        | DCM-21WA4P-NMC-K52       | QRN 94008   | ITT CANNON                            |
| 311P10-18P-C-12                                                                                                                        | SCBM21WA4M2000G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-18P-C-15                                                                                                                        | DCM-21WA4P-NMC-K52       | QRN 94008   | ITT CANNON                            |
| 311P10-18P-C-15                                                                                                                        | SCBM21WA4M20200G-1082.24 | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-18S-B-12                                                                                                                        | DCM-21WA4S-NMB-K52       | QRN 94008   | ITT CANNON                            |
| 311P10-18S-B-12                                                                                                                        | SCBM21WA4F2000G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-18S-B-15                                                                                                                        | DCM-21WA4S-NMB-K52       | QRN 94008   | ITT CANNON                            |
| 311P10-18S-B-15                                                                                                                        | SCBM21WA4F20200G-1082.24 | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-18S-C-12                                                                                                                        | DCM-21WA4S-NMC-K52       | QRN 94008   | ITT CANNON                            |
| 311P10-18S-C-12                                                                                                                        | SCBM21WA4F2000G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-18S-C-15                                                                                                                        | DCM-21WA4S-NMC-K52       | QRN 94008   | ITT CANNON                            |
| 311P10-18S-C-15                                                                                                                        | SCBM21WA4F20200G-1082.24 | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-20P-B-12                                                                                                                        | DCM-25W3P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-20P-B-12                                                                                                                        | SCBM25W3M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-20P-B-15                                                                                                                        | DCM-25W3P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-20P-B-15                                                                                                                        | SCBM25W3M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-20P-C-12                                                                                                                        | DCM-25W3P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-20P-C-12                                                                                                                        | SCBM-25W3M2000G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-20P-C-15                                                                                                                        | DCM-25W3P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-20P-C-15                                                                                                                        | SCBM25W3M2020G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |

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|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|---------------------------------------|
| Procurement PIN                                                                                                                        | Manufacturer Similar PIN | Test Report | Manufacturer                          |
| 311P10-20S-B-12                                                                                                                        | DCM-25W3S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-20S-B-12                                                                                                                        | SCBM25W3F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-20S-B-15                                                                                                                        | DCM-25W3S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-20S-B-15                                                                                                                        | SCBM25W3F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-20S-C-12                                                                                                                        | DCM-25W3S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-20S-C-12                                                                                                                        | SCBM25W3F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-20S-C-15                                                                                                                        | DCM-25W3S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-20S-C-15                                                                                                                        | SCBM25W3F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-21P-B-12                                                                                                                        | DCM-27W2P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-21P-B-12                                                                                                                        | SCBM27W2M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-21P-B-15                                                                                                                        | DCM-27W2P-NMB-K52        | QRN 94008   | <a href="#">ITT CANNON</a>            |
| 311P10-21P-B-15                                                                                                                        | SCBM27W2M10200G-1082.24  | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-21P-C-12                                                                                                                        | DCM-27W2P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-21P-C-12                                                                                                                        | SCBM27W2000G-1082.24     | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-21P-C-15                                                                                                                        | DCM-27W2P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-21P-C-15                                                                                                                        | SCBM27W2M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-21S-B-12                                                                                                                        | DCM-27W2S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-21S-B-12                                                                                                                        | SCBM27W2F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-21S-B-15                                                                                                                        | DCM-27W2S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-21S-B-15                                                                                                                        | SCBM27W2F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-21S-C-12                                                                                                                        | DCM-25W3S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-21S-C-12                                                                                                                        | SCBM27WF2000G-1082.24    | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-21S-C-15                                                                                                                        | DCM-27W2S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-21S-C-15                                                                                                                        | SCBM27W2M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-22P-B-12                                                                                                                        | DDM-24W7P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-22P-B-12                                                                                                                        | SCBM24W7M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-22P-B-15                                                                                                                        | DDM-24W7P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-22P-B-15                                                                                                                        | SCBM24W7M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-22P-C-12                                                                                                                        | DDM-24W6S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-22P-C-12                                                                                                                        | SCBM24W7M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-22P-C-15                                                                                                                        | DDM-24W6S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-22P-C-15                                                                                                                        | SCBM24W7M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-22S-B-12                                                                                                                        | DDM-24W7S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-22S-B-12                                                                                                                        | SCBM24W7F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-22S-B-15                                                                                                                        | DDM-24W7S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-22S-B-15                                                                                                                        | SCBM24W7F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |

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|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|---------------------------------------|
| Procurement PIN                                                                                                                        | Manufacturer Similar PIN | Test Report | Manufacturer                          |
| 311P10-22S-C-12                                                                                                                        | DDM-24W7S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-22S-C-12                                                                                                                        | SCBM24W7F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-22S-C-15                                                                                                                        | DDM-24W7P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-22S-C-15                                                                                                                        | SCBM24W7F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-23P-B-12                                                                                                                        | DDM-36W4P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-23P-B-12                                                                                                                        | SCBM36W4M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-23P-B-15                                                                                                                        | DDM-36W4P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-23P-B-15                                                                                                                        | SCBM36W4M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-23P-C-12                                                                                                                        | DDM-36W4S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-23P-C-12                                                                                                                        | SCBM36W4M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-23P-C-15                                                                                                                        | DDM-36W4S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-23P-C-15                                                                                                                        | SCBM36W4M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-23S-B-12                                                                                                                        | DDM-36W4S-NMB-K52        | QRN 94008   | <a href="#">ITT CANNON</a>            |
| 311P10-23S-B-12                                                                                                                        | SCBM36W4F2000G-1082.24   | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-23S-B-15                                                                                                                        | DDM-36W4S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-23S-B-15                                                                                                                        | SCBM36W4F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-23S-C-12                                                                                                                        | DDM-36W4S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-23S-C-12                                                                                                                        | SCBM36W4F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-23S-C-15                                                                                                                        | DDM-36W4S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-23S-C-15                                                                                                                        | SCBM36W4F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-24P-B-12                                                                                                                        | DDM-43W2P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-24P-B-12                                                                                                                        | SCBM43W2M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-24P-B-15                                                                                                                        | DDM-43W2P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-24P-B-15                                                                                                                        | SCBM43W2M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-24P-C-12                                                                                                                        | DDM-43W2S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-24P-C-12                                                                                                                        | SCBM43W2F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-24P-C-15                                                                                                                        | DDM-43W2S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-24P-C-15                                                                                                                        | SCBM43W2M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-24S-B-12                                                                                                                        | DDM-43W2S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-24S-B-12                                                                                                                        | SCBM43W2F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-24S-B-15                                                                                                                        | DDM-43W2S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-24S-B-15                                                                                                                        | SCBM47W1M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-24S-C-12                                                                                                                        | DDM-43W2S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-24S-C-12                                                                                                                        | SCBM43W2F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-24S-C-15                                                                                                                        | DDM-43W2S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-24S-C-15                                                                                                                        | SCBM43W2F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |

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|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|---------------------------------------|
| Procurement PIN                                                                                                                        | Manufacturer Similar PIN | Test Report | Manufacturer                          |
| 311P10-25P-B-12                                                                                                                        | DDM-47W1P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-25P-B-12                                                                                                                        | SCBM471M20200G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-25P-B-15                                                                                                                        | DDM-47W1P-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-25P-B-15                                                                                                                        | SCBM47W1F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-25P-C-12                                                                                                                        | DDM-47W1P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-25P-C-12                                                                                                                        | SCBM47W1M2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-25P-C-15                                                                                                                        | DDM-47W1P-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-25P-C-15                                                                                                                        | SCBM47W1M20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-25S-B-12                                                                                                                        | DDM-47W1S-NMB-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-25S-B-12                                                                                                                        | SCBM47W1F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-25S-B-15                                                                                                                        | DDM-47W1S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-25S-B-15                                                                                                                        | SCBM47W1F20200G-1082.24  | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-25S-C-12                                                                                                                        | DDM-47W1S-NMC-K52        | QRN 94008   | ITT CANNON                            |
| 311P10-25S-C-12                                                                                                                        | SCBM47W1F2000G-1082.24   | QRN 94007   | POSITRONIC INDUSTRIES                 |
| 311P10-25S-C-15                                                                                                                        | DDM-47W1S-NMC-K52        | QRN 94008   | <a href="#">ITT CANNON</a>            |
| 311P10-25S-C-15                                                                                                                        | SCBM47W1F20200G-1082.24  | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P10-29-B-12                                                                                                                         | DAM-15P-NMB-K52          | QRN 94008   | ITT CANNON                            |

1/ "Parts with either the split tine socket construction (i.e., "F" designator) or Posiband™ napkin spring construction (i.e., "S" designator) are both qualified. However, for future procurements of these items, Positronic is discontinuing use of split tine sockets in favor of Posiband™ sockets only."

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|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------|---------------------------------------|
| Procurement PIN                                                                                                                                    | Manufacturer Similar PIN                            | Test Report   | Manufacturer                          |
| 311P405-6P-B-12                                                                                                                                    | SCBC5W1M0000G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-6P-B-15                                                                                                                                    | SCBC5W1M00200G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-6S-B-12                                                                                                                                    | SCBC5W1F0000G-1082.24<br>SCBC5W1S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-6S-B-15                                                                                                                                    | SCBC5W1F00200G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-7P-B-12                                                                                                                                    | SCBM3W3M0000G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-7P-B-12                                                                                                                                    | 448153-2                                            | QRN 94005     | <a href="#">TE CONNECTIVITY</a>       |
| 311P405-7P-B-15                                                                                                                                    | SCBM3W3M00200G-1082-24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-7P-B-15                                                                                                                                    | 448153-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-7S-B-12                                                                                                                                    | SCBM3W3F0000G-1082.24<br>SCBM3W3S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-7S-B-12                                                                                                                                    | 445705-2                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-7S-B-15                                                                                                                                    | SCBM3W3F00200G-1082.24<br>SCBM3W3S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-7S-B-15                                                                                                                                    | 445705-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-8P-B-12                                                                                                                                    | SCBC7W2M0000G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-8P-B-12                                                                                                                                    | 448154-2                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-8P-B-15                                                                                                                                    | SCBC7W2M00200G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-8P-B-15                                                                                                                                    | 448154-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-8S-B-12                                                                                                                                    | SCBC7W2F000G-1082.24<br>SCBC7W2S000G-1082.24 1/     | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-8S-B-15                                                                                                                                    | SCBC7W2F00200G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-9P-B-12                                                                                                                                    | DAA11W1PNMB-K52                                     | QRN 94008     | <a href="#">ITT CANNON</a>            |
| 311P405-9P-B-12                                                                                                                                    | SCBC11W1M0000G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-9P-B-12                                                                                                                                    | 211111-2                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-9P-B-15                                                                                                                                    | SCBC11W1M00200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-9P-B-15                                                                                                                                    | 211111-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-9S-B-12                                                                                                                                    | DAA11W1SNMB-K52                                     | QRN 94008     | ITT CANNON                            |
| 311P405-9S-B-12                                                                                                                                    | SCBC11W1F0000G-1082.24<br>SCBC11W1S0000G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-9S-B-12                                                                                                                                    | 211112-2                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-9S-B-15                                                                                                                                    | SCBC11W1F00200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-9S-B-15                                                                                                                                    | 211112-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-10P-B-12                                                                                                                                   | DAM5W5PNMBK47                                       | Q24308-040609 | ITT CANNON                            |
| 311P405-10P-B-12                                                                                                                                   | SCBM5W5M0000G-1082.24                               | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a> |

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|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------|---------------------------------------|
| Procurement PIN                                                                                                                                    | Manufacturer Similar PIN                            | Test Report   | Manufacturer                          |
| 311P405-10P-B-12                                                                                                                                   | 212491-6                                            | QRN 94005     | <a href="#">TE CONNECTIVITY</a>       |
| 311P405-10P-B-15                                                                                                                                   | SCBM5W5M00200G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-10P-B-15                                                                                                                                   | 212491-7                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-10S-B-12                                                                                                                                   | DAM5W5SNMBK47                                       | Q24308-040609 | ITT CANNON                            |
| 311P405-10S-B-12                                                                                                                                   | SCBM5W5F0000G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-10S-B-12                                                                                                                                   | SCBM5W5F000G-1082.24<br>SCBM5W5S000G-1082.24 1/     | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-10S-B-12                                                                                                                                   | 212059-2                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-10S-B-15                                                                                                                                   | SCBM5W5F00200G-1082.24<br>SCBM5W5S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-10S-B-15                                                                                                                                   | SCBM5W5F00200G-1082.24<br>SCBM5W5S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-10S-B-15                                                                                                                                   | 212059-06                                           | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-11P-B-12                                                                                                                                   | DAM9W4PNMB-K52                                      | Q24308-040609 | ITT CANNON                            |
| 311P405-11P-B-12                                                                                                                                   | SCBC9W4M00200G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-11P-B-12                                                                                                                                   | 212498-2                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-11P-B-15                                                                                                                                   | SCBC9W4M00200G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-11P-B-15                                                                                                                                   | 212498-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-11S-B-12                                                                                                                                   | SCBC9W4F0000G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-11S-B-12                                                                                                                                   | 212502-2                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-11S-B-15                                                                                                                                   | SCBC9W400200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-11S-B-15                                                                                                                                   | 212502-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-12P-B-12                                                                                                                                   | DBA13W3PNMB-K52                                     | QRN 94008     | <a href="#">ITT CANNON</a>            |
| 311P405-12P-B-12                                                                                                                                   | SCBC13W3M0000G-1082-24                              | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P405-12P-B-12                                                                                                                                   | 208810-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-12P-B-15                                                                                                                                   | SCBC13W3M00200G-1082-24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-12P-B-15                                                                                                                                   | 208810-4                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-12S-B-12                                                                                                                                   | DBA13W3SNMB-K52                                     | QRN 94008     | ITT CANNON                            |
| 311P405-12S-B-12                                                                                                                                   | SCBC13W3F0000G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-12S-B-12                                                                                                                                   | 208811-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-12S-B-15                                                                                                                                   | SCBC13W3F00200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-12S-B-15                                                                                                                                   | 208811-4                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-13P-B-12                                                                                                                                   | DBMA-17W2P-NMB-K52                                  | QRN 94008     | ITT CANNON                            |
| 311P405-13P-B-12                                                                                                                                   | SCBC17W2M0000G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-13P-B-12                                                                                                                                   | 212506-2                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-13P-B-15                                                                                                                                   | SCBC17W2M00200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |

| GSFC <a href="#">S-311-P-4/05</a> , Connector, Electrical, Rectangular, Subminiature, Polarized Shell, Detailed Specification For Space Flight Use |                                                     |               |                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------|---------------------------------------|
| Procurement PIN                                                                                                                                    | Manufacturer Similar PIN                            | Test Report   | Manufacturer                          |
| 311P405-13P-B-15                                                                                                                                   | 212506-4                                            | QRN 94005     | <a href="#">TE CONNECTIVITY</a>       |
| 311P405-13S-B-12                                                                                                                                   | DBMA-17W2S-NMB-K52                                  | QRN 94008     | <a href="#">ITT CANNON</a>            |
| 311P405-13S-B-12                                                                                                                                   | SCBC17W2F0000G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-13S-B-12                                                                                                                                   | 212510-2                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-13S-B-15                                                                                                                                   | SCBC17W2F00200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-13S-B-15                                                                                                                                   | 212510-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-14P-B-12                                                                                                                                   | DCA21W1PNMB-K52                                     | Q24308-040609 | ITT CANNON                            |
| 311P405-14P-B-12                                                                                                                                   | SCBC21W1M0000G-1082.24                              | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P405-14P-B-12                                                                                                                                   | 212522-3                                            | QRN 94005     | <a href="#">TE CONNECTIVITY</a>       |
| 311P405-14P-B-15                                                                                                                                   | SCBC21W1M00200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-14P-B-15                                                                                                                                   | 212522-4                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-14S-B-12                                                                                                                                   | SCBC21W1F0000G-1082.24<br>SCBC21W1S0000G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-14S-B-12                                                                                                                                   | 212526-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-14S-B-15                                                                                                                                   | SCBC21W1F00200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-14S-B-15                                                                                                                                   | 212526-4                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-15P-B-12                                                                                                                                   | DCM8W8PNMB-K52                                      | Q24308-040609 | ITT CANNON                            |
| 311P405-15P-B-12                                                                                                                                   | SCBM8W8M0000G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-15P-B-12                                                                                                                                   | 446405-2                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-15P-B-15                                                                                                                                   | SCBM8W8M00200G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-15P-B-15                                                                                                                                   | 446405-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-15S-B-12                                                                                                                                   | DCM8W8SNMB-K52                                      | Q24308-040609 | ITT CANNON                            |
| 311P405-15S-B-12                                                                                                                                   | SCBM8W8F0000G-1082.24<br>SCBM8W8S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-15S-B-12                                                                                                                                   | 445730-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-15S-B-15                                                                                                                                   | SCBM8W8F00200G-1082.24<br>SCBM8W8S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-15S-B-15                                                                                                                                   | 445730-4                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-16P-B-12                                                                                                                                   | SCBC13W6M0000G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-16P-B-15                                                                                                                                   | SCBC13W6M00200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-16S-B-12                                                                                                                                   | SCBC13W6F0000G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-16S-B-15                                                                                                                                   | SCBC13W6400200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-17P-B-12                                                                                                                                   | SCBC17W5M0000G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-17P-B-12                                                                                                                                   | 212514-3                                            | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-17P-B-15                                                                                                                                   | SCBC17W5M00200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                 |

| GSFC <a href="#">S-311-P-4/05</a> , Connector, Electrical, Rectangular, Subminiature, Polarized Shell, Detailed Specification For Space Flight Use |                                                       |               |                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------|---------------------------------------|
| Procurement PIN                                                                                                                                    | Manufacturer Similar PIN                              | Test Report   | Manufacturer                          |
| 311P405-17P-B-15                                                                                                                                   | 212514-4                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-17S-B-12                                                                                                                                   | SCBC17W5F0000G-1082.24                                | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-17S-B-12                                                                                                                                   | 212518-3                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-17S-B-15                                                                                                                                   | SCBC17W5F00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-17S-B-15                                                                                                                                   | 212518-4                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-18P-B-12                                                                                                                                   | DCA21W1PNMB-K52                                       | Q24308-040609 | <a href="#">ITT CANNON</a>            |
| 311P405-18P-B-12                                                                                                                                   | SCBC21WA4M0000G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-18P-B-12                                                                                                                                   | 212530-2                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-18P-B-15                                                                                                                                   | SCBC21WAFM00200G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-18P-B-15                                                                                                                                   | 212530-3                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-18S-B-12                                                                                                                                   | DCA21WA1SNMB-K52                                      | Q24308-040609 | ITT CANNON                            |
| 311P405-18S-B-12                                                                                                                                   | SCBC21WA4F0000G-1082.24<br>SCBC21WA4S0000G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-18S-B-12                                                                                                                                   | 212534-2                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-18S-B-15                                                                                                                                   | SCBC21WA4F00200G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-18S-B-15                                                                                                                                   | 212534-3                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-20P-B-12                                                                                                                                   | SCBC25W3M0000G-1082.24                                | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-20P-B-12                                                                                                                                   | 208742-2                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-20P-B-15                                                                                                                                   | SCBC25W3M00200G-1082.24                               | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P405-20P-B-15                                                                                                                                   | 208742-3                                              | QRN 94005     | <a href="#">TE CONNECTIVITY</a>       |
| 311P405-20S-B-12                                                                                                                                   | SCBC25W3F0000G-1082.24<br>SCBC25W3S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-20S-B-12                                                                                                                                   | 208551-2                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-20S-B-15                                                                                                                                   | SCBC25W3F00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-20S-B-15                                                                                                                                   | 208551-3                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-21P-B-12                                                                                                                                   | SCBC27W2M000G-1082.24                                 | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-21P-B-12                                                                                                                                   | 212538-2                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-21P-B-15                                                                                                                                   | SCBC27W2M00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-21P-B-15                                                                                                                                   | 212538-3                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-21S-B-12                                                                                                                                   | SCBC27W2F0000G-1082.24                                | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-21S-B-12                                                                                                                                   | 212542-2                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-21S-B-15                                                                                                                                   | SCBC27W2F00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-21S-B-15                                                                                                                                   | 212542-3                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-22P-B-12                                                                                                                                   | SCBC24W7M0000G-1082.24                                | QRN 94007     | POSITRONIC INDUSTRIES                 |

| GSFC <a href="#">S-311-P-4/05</a> , Connector, Electrical, Rectangular, Subminiature, Polarized Shell, Detailed Specification For Space Flight Use |                                                       |               |                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------|---------------------------------------|
| Procurement PIN                                                                                                                                    | Manufacturer Similar PIN                              | Test Report   | Manufacturer                          |
| 311P405-22P-B-12                                                                                                                                   | 208743-2                                              | QRN 94005     | <a href="#">TE CONNECTIVITY</a>       |
| 311P405-22P-B-15                                                                                                                                   | SCBC25W7M00200G-1082.24                               | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a> |
| 311P405-22P-B-15                                                                                                                                   | 208743-6                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-22S-B-12                                                                                                                                   | SCBC244W7F0000G-1082.24<br>SCBC244W7S0000G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-22S-B-12                                                                                                                                   | 208552-2                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-22S-B-15                                                                                                                                   | SCBC24W7F00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-22S-B-15                                                                                                                                   | 208552-3                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-23P-B-12                                                                                                                                   | SCBC36W4M0000G-1082.24                                | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-23P-B-12                                                                                                                                   | 207644-3                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-23P-B-15                                                                                                                                   | SCBC36W4M00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-23P-B-15                                                                                                                                   | 207644-4                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-23S-B-12                                                                                                                                   | SCBC36W4M00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-23S-B-12                                                                                                                                   | 208550-2                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-23S-B-15                                                                                                                                   | SCBC36W4F0000G-1082.24                                | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-23S-B-15                                                                                                                                   | 208550-3                                              | QRN 94005     | TE CONNECTIVITY                       |
| 311P405-24P-B-12                                                                                                                                   | SCBC43W2M0000G-1082.24                                | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-24P-B-15                                                                                                                                   | SCBC43W2M00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-24S-B-12                                                                                                                                   | DDA43W2SNMB-K52                                       | Q24308-040609 | ITT CANNON                            |
| 311P405-24S-B-12                                                                                                                                   | SCBC47W1F0000G-1082.24<br>SCBC47W1S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-24S-B-15                                                                                                                                   | SCBC43W2F00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-25P-B-12                                                                                                                                   | SCBC47W1M0000G-1082.24                                | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-25P-B-15                                                                                                                                   | SCBC47W1M00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-25S-B-12                                                                                                                                   | SCBC47W1F0000G-1082.24<br>SCBC47W1S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                 |
| 311P405-25S-B-15                                                                                                                                   | SCBC47W1F00200G-1082.24                               | QRN 94007     | POSITRONIC INDUSTRIES                 |

1/ "Parts with either the split tine socket construction (i.e., "F" designator) or Posiband™ napkin spring construction (i.e., "S" designator) are both qualified. However, for future procurements of these items, Positronic is discontinuing use of split tine sockets in favor of Posiband™ sockets only."

| GSFC <a href="#">S-311-P-4/06</a> , Connector, Electrical, Coaxial, and High Voltage For Electrical Connectors |                          |             |                                 |
|----------------------------------------------------------------------------------------------------------------|--------------------------|-------------|---------------------------------|
| Procurement PIN                                                                                                | Manufacturer Similar PIN | Test Report | Manufacturer                    |
| GCP1                                                                                                           | DM53740-17               | QRN 94008   | <a href="#">ITT CANNON</a>      |
| GCP1                                                                                                           | Not Assigned             | QRN 93003   | <a href="#">TE CONNECTIVITY</a> |
| GCP2                                                                                                           | DM53740-15               | QRN 94008   | ITT CANNON                      |
| GCP2                                                                                                           | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCP3                                                                                                           | DM53740-16               | QRN 94008   | ITT CANNON                      |
| GCP3                                                                                                           | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCP4                                                                                                           | DM53740-18               | QRN 94008   | ITT CANNON                      |
| GCP4                                                                                                           | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCRO2                                                                                                          | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCRP1                                                                                                          | DM53741-12               | QRN 94008   | ITT CANNON                      |
| GCRP1                                                                                                          | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCRP2                                                                                                          | DM53741-11               | QRN 94008   | ITT CANNON                      |
| GCRP3                                                                                                          | DM53741-10               | QRN 94008   | ITT CANNON                      |
| GCRP3                                                                                                          | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCRP4                                                                                                          | DM53741-13               | QRN 94008   | ITT CANNON                      |
| GCRP4                                                                                                          | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCS1                                                                                                           | DM53742-18               | QRN 94008   | ITT CANNON                      |
| GCS1                                                                                                           | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCS2                                                                                                           | DM53742-16               | QRN 94008   | ITT CANNON                      |
| GCS2                                                                                                           | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCS3                                                                                                           | DM53742-17               | QRN 94008   | ITT CANNON                      |
| GCS3                                                                                                           | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCS4                                                                                                           | DM53742-19               | QRN 94008   | ITT CANNON                      |
| GCS4                                                                                                           | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCSR1                                                                                                          | DM43743-18               | QRN 94008   | ITT CANNON                      |
| GCSR1                                                                                                          | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCSR2                                                                                                          | DM43743-16               | QRN 94008   | ITT CANNON                      |
| GCSR2                                                                                                          | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCSR3                                                                                                          | DM43743-17               | QRN 94008   | ITT CANNON                      |
| GCSR3                                                                                                          | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GCSR4                                                                                                          | DM43743-19               | QRN 94008   | ITT CANNON                      |
| GCSR4                                                                                                          | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GHP6                                                                                                           | DM51157-8                | QRN 94008   | ITT CANNON                      |
| GHP6                                                                                                           | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GHRP6                                                                                                          | DM51157-5005             | QRN 94008   | ITT CANNON                      |

| GSFC <a href="#">S-311-P-4/06</a> , Connector, Electrical, Coaxial, and High Voltage For Electrical Connectors |                          |             |                                 |
|----------------------------------------------------------------------------------------------------------------|--------------------------|-------------|---------------------------------|
| Procurement PIN                                                                                                | Manufacturer Similar PIN | Test Report | Manufacturer                    |
| GHRP6                                                                                                          | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GHRS6                                                                                                          | DM51155-5004             | QRN 94008   | ITT CANNON                      |
| GHRS6                                                                                                          | Not Assigned             | QRN 93003   | TE CONNECTIVITY                 |
| GHS6                                                                                                           | DM51155-7                | QRN 94008   | <a href="#">ITT CANNON</a>      |
| GHS6                                                                                                           | Not Assigned             | QRN 93003   | <a href="#">TE CONNECTIVITY</a> |

| GSFC <a href="#">S-311-P-4/07</a> , Connector, Electrical, Rectangular, Subminiature, Rack and Panel, Detailed Specification For Space Flight Use |                                                 |               |                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------|-------------------------------------------|
| Procurement PIN                                                                                                                                   | Manufacturer Similar PIN                        | Test Report   | Manufacturer                              |
| 311P407-1P-B-12                                                                                                                                   | SDD15M0000G-1082.24                             | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a>     |
| 311P407-1P-B-12                                                                                                                                   | 863515PNMBL                                     | QRN 93004     | <a href="#">SOURIAU, AN EATON COMPANY</a> |
| 311P407-1P-B-12                                                                                                                                   | 206498-4                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-1P-B-12                                                                                                                                   | DEMA15PNMBK47FO                                 | Q24308-040609 | ITT CANNON                                |
| 311P407-1P-B-12                                                                                                                                   | C115368-2320                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P407-1P-B-15                                                                                                                                   | SDD15M00200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-1P-B-15                                                                                                                                   | 206498-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-1S-B-12                                                                                                                                   | SDD15F0000G-1082.24<br>SDD15S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-1S-B-12                                                                                                                                   | 863515SNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P407-1S-B-12                                                                                                                                   | 206499-4                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-1S-B-12                                                                                                                                   | DEMA15SNMBK47FO                                 | Q24308-040609 | ITT CANNON                                |
| 311P407-1S-B-12                                                                                                                                   | C115368-2321                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P407-1S-B-15                                                                                                                                   | SDD15F00200G-1082.24<br>SDD15S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-1S-B-15                                                                                                                                   | 206499-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-2P-B-12                                                                                                                                   | SDD26M0000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-2P-B-12                                                                                                                                   | 863526PNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P407-2P-B-12                                                                                                                                   | 206500-4                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-2P-B-12                                                                                                                                   | DAMA26PNMBK47FO                                 | Q24308-040609 | ITT CANNON                                |
| 311P407-2P-B-12                                                                                                                                   | C115368-2322                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P407-2P-B-15                                                                                                                                   | SDD26M00200G-1082-24                            | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-2P-B-15                                                                                                                                   | 206500-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-2S-B-12                                                                                                                                   | SDD26F0000G-1082.24<br>SDD26S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-2S-B-12                                                                                                                                   | 863526SNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P407-2S-B-12                                                                                                                                   | 206501-4                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-2S-B-12                                                                                                                                   | DAMA26SNMBK47FO                                 | Q24308-040609 | ITT CANNON                                |
| 311P407-2S-B-12                                                                                                                                   | C115368-2323                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P407-2S-B-15                                                                                                                                   | SDD26F00200G-1082.24<br>SDD26S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                     |

| GSFC <a href="#">S-311-P-4/07</a> , Connector, Electrical, Rectangular, Subminiature, Rack and Panel, Detailed Specification For Space Flight Use |                                                 |               |                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------|-------------------------------------------|
| Procurement PIN                                                                                                                                   | Manufacturer Similar PIN                        | Test Report   | Manufacturer                              |
| 311P407-2S-B-15                                                                                                                                   | 206501-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-3P-B-12                                                                                                                                   | SDD44M0000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-3P-B-12                                                                                                                                   | 863544PNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P407-3P-B-12                                                                                                                                   | 206063-4                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-3P-B-12                                                                                                                                   | DBMA44PNMBK47FO                                 | Q24308-040609 | <a href="#">ITT CANNON</a>                |
| 311P407-3P-B-12                                                                                                                                   | C115368-2324                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P407-3P-B-15                                                                                                                                   | SDD44M00200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-3P-B-15                                                                                                                                   | 206063-2                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-3S-B-12                                                                                                                                   | SDD44F0000G-1082.24<br>SDD44S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-3S-B-12                                                                                                                                   | 863544SNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P407-3S-B-12                                                                                                                                   | DBMA44SNMBK47FO                                 | Q24308-040609 | ITT CANNON                                |
| 311P407-3S-B-12                                                                                                                                   | 206064-4                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-3S-B-12                                                                                                                                   | C115368-2325                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P407-3S-B-15                                                                                                                                   | SDD44F00200G-1082.24<br>SDD44S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-3S-B-15                                                                                                                                   | 206064-2                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-4P-B-12                                                                                                                                   | SDD62M0000G-1082.24                             | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a>     |
| 311P407-4P-B-12                                                                                                                                   | 863562PNMBL                                     | QRN 93004     | <a href="#">SOURIAU, AN EATON COMPANY</a> |
| 311P407-4P-B-12                                                                                                                                   | 206502-4                                        | CTL5066-027   | <a href="#">TE CONNECTIVITY</a>           |
| 311P407-4P-B-12                                                                                                                                   | DCMA62PNMBK47FO                                 | Q24308-040609 | ITT CANNON                                |
| 311P407-4P-B-12                                                                                                                                   | C115368-2326                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P407-4P-B-15                                                                                                                                   | SDD62M00200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-4P-B-15                                                                                                                                   | 206502-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-4S-B-12                                                                                                                                   | SDD62F0000G-1082.24<br>SDD62S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-4S-B-12                                                                                                                                   | 863562SNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P407-4S-B-12                                                                                                                                   | 206503-4                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-4S-B-12                                                                                                                                   | DCMA62SNMBK47FO                                 | Q24308-040609 | ITT CANNON                                |
| 311P407-4S-B-12                                                                                                                                   | C115368-2327                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P407-4S-B-15                                                                                                                                   | SDD62F00200G-1082.24<br>SDD62S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-4S-B-15                                                                                                                                   | 206503-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-5P-B-12                                                                                                                                   | SDD78M0000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P407-5P-B-12                                                                                                                                   | 863578PNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P407-5P-B-12                                                                                                                                   | 206504-4                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P407-5P-B-12                                                                                                                                   | DDMA78PNMBK47FO                                 | Q24308-040609 | ITT CANNON                                |
| 311P407-5P-B-12                                                                                                                                   | C115368-2328                                    | 24308-3535-12 | C&K CONNECT                               |

GSFC [S-311-P-4/07](#), Connector, Electrical, Rectangular, Subminiature, Rack and Panel, Detailed Specification For Space Flight Use

| Procurement PIN | Manufacturer Similar PIN                        | Test Report   | Manufacturer              |
|-----------------|-------------------------------------------------|---------------|---------------------------|
| 311P407-5P-B-15 | SDD78M00200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES     |
| 311P407-5P-B-15 | 206504-1                                        | CTL5066-027   | TE CONNECTIVITY           |
| 311P407-5S-B-12 | SDD78F0000G-1082.24<br>SDD78S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES     |
| 311P407-5S-B-12 | 863578SNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY |
| 311P407-5S-B-12 | 206505-4                                        | CTL5066-027   | TE CONNECTIVITY           |
| 311P407-5S-B-12 | DDMA78SNMBK47FO                                 | Q24308-040609 | ITT CANNON                |
| 311P407-5S-B-12 | C115368-2329                                    | 24308-3535-12 | C&K CONNECT               |
| 311P407-5S-B-15 | SDD78F00200G-1082.24<br>SDD78S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES     |
| 311P407-5S-B-15 | 206505-1                                        | CTL5066-027   | TE CONNECTIVITY           |
| 311P407-6P-B-12 | SND104M00G-1082.24                              | QRN 94007     | POSITRONIC INDUSTRIES     |
| 311P407-6P-B-12 | TBD                                             | QRN 93004     | SOURIAU, AN EATON COMPANY |
| 311P407-6P-B-12 | 206066-4                                        | CTL5066-027   | TE CONNECTIVITY           |
| 311P407-6P-B-15 | SDD104M0020G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES     |
| 311P407-6P-B-15 | 206066-2                                        | CTL5066-027   | TE CONNECTIVITY           |
| 311P407-6S-B-12 | SDD104F000G-1082.24<br>SDD104S000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES     |
| 311P407-6S-B-12 | TBD                                             | QRN 93004     | SOURIAU, AN EATON COMPANY |
| 311P407-6S-B-12 | 206065-4                                        | CTL5066-027   | TE CONNECTIVITY           |
| 311P407-6S-B-15 | SDD104F0020G-1082.24<br>SDD104S0020G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES     |
| 311P407-6S-B-15 | 206065-2                                        | CTL5066-027   | TE CONNECTIVITY           |

1/ "Parts with either the split tine socket construction (i.e., "F" designator) or Posiband™ napkin spring construction (i.e., "S" designator) are both qualified. However, for future procurements of these items, Positronic is discontinuing use of split tine sockets in favor of Posiband™ sockets only."

GSFC [S-311-P-4/08](#), Connector, Electrical, Power, Crimp Style, Rear Removable, Size 22D

| Procurement PIN | Manufacturer Similar PIN | Test Report | Manufacturer                              |
|-----------------|--------------------------|-------------|-------------------------------------------|
| G08P1           | 030-2042-002             | QRN 94008   | <a href="#">ITT CANNON</a>                |
| G08P1           | MC8022D-50-1202.4        | QRN 94007   | POSITRONIC INDUSTRIES                     |
| G08P1           | 340100507B               | QRN 93004   | SOURIAU, AN EATON COMPANY                 |
| G08P1           | 204370-8                 | CTL5064-058 | TE CONNECTIVITY                           |
| G08S1           | 032-1147-002             | QRN 94008   | ITT CANNON                                |
| G08S1           | FC8022D-50-1202.4        | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a>     |
| G08S1           | 340100508B               | QRN 93004   | <a href="#">SOURIAU, AN EATON COMPANY</a> |
| G08S1           | 206071-1                 | CTL5064-058 | <a href="#">TE CONNECTIVITY</a>           |
| G08S2           | FC8022M2-GSFC            | 00434621.AA | POSITRONIC INDUSTRIES                     |

| GSFC <a href="#">S-311-P-4/09</a> , Connector, Electrical, Polarized Shell, Rack and Panel, For Space Flight Use |                                                 |               |                                           |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------|-------------------------------------------|
| Procurement PIN                                                                                                  | Manufacturer Similar PIN                        | Test Report   | Manufacturer                              |
| 311P409-1P-B-12                                                                                                  | DEMA9PNMBK47FO                                  | Q24308-040609 | <a href="#">ITT CANNON</a>                |
| 311P409-1P-B-12                                                                                                  | SND9M0000G-1082.24                              | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a>     |
| 311P409-1P-B-12                                                                                                  | 863009PNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P409-1P-B-12                                                                                                  | 207252-2                                        | CTL5066-027   | <a href="#">TE CONNECTIVITY</a>           |
| 311P409-1P-B-12                                                                                                  | C115370-1500                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P409-1P-B-15                                                                                                  | SND9M00200G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-1P-B-15                                                                                                  | 207252-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-1S-B-12                                                                                                  | DEMA9SNMBK47FO                                  | QRN 94008     | ITT CANNON                                |
| 311P409-1S-B-12                                                                                                  | SND9F0000G-1082.24<br>SND9S0000G-1082.24 1/     | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-1S-B-12                                                                                                  | 863009SNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P409-1S-B-12                                                                                                  | 207253-2                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-1S-B-12                                                                                                  | C115370-1501                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P409-1S-B-15                                                                                                  | SND9F00200G-1082.24<br>SND9S00200G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-1S-B-15                                                                                                  | 207253-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-29-B-12                                                                                                  | SND15M0000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-2P-B-12                                                                                                  | DAMA15PNMBK47FO                                 | QRN 94008     | ITT CANNON                                |
| 311P409-2P-B-12                                                                                                  | 863015PNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P409-2P-B-12                                                                                                  | 206798-2                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-2P-B-12                                                                                                  | C115370-1502                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P409-2P-B-15                                                                                                  | SND15M00200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-2P-B-15                                                                                                  | 206798-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-2S-B-12                                                                                                  | DAMA15SNMBK47FO                                 | QRN 94008     | ITT CANNON                                |
| 311P409-2S-B-12                                                                                                  | SND15F0000G-1082.24<br>SND15S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-2S-B-12                                                                                                  | 863015SNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P409-2S-B-12                                                                                                  | 206799-2                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-2S-B-12                                                                                                  | C115370-1503                                    | 24308-3535-12 | <a href="#">C&amp;K CONNECT</a>           |
| 311P409-2S-B-15                                                                                                  | SND15F00200G-1082.24<br>SND15S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-2S-B-15                                                                                                  | 206799-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-3P-B-12                                                                                                  | DBMA25PNMBK47FO                                 | QRN 94008     | ITT CANNON                                |
| 311P409-3P-B-12                                                                                                  | SND25M0000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-3P-B-12                                                                                                  | 863025PNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P409-3P-B-12                                                                                                  | 206800-2                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-3P-B-12                                                                                                  | C115370-1504                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P409-3P-B-15                                                                                                  | SND25M00200G-1082.24                            | QRN94007      | <a href="#">SOURIAU, AN EATON COMPANY</a> |

| GSFC <a href="#">S-311-P-4/09</a> , Connector, Electrical, Polarized Shell, Rack and Panel, For Space Flight Use |                                                 |               |                                           |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------|-------------------------------------------|
| Procurement PIN                                                                                                  | Manufacturer Similar PIN                        | Test Report   | Manufacturer                              |
| 311P409-3P-B-15                                                                                                  | 206800-1                                        | CTL5066-027   | <a href="#">TE CONNECTIVITY</a>           |
| 311P409-3S-B-12                                                                                                  | DBMA25SNMBK47FO                                 | QRN 94008     | <a href="#">ITT CANNON</a>                |
| 311P409-3S-B-12                                                                                                  | SND25F0000G-1082.24<br>SND25S0000G-1082.24 1/   | QRN 94007     | <a href="#">POSITRONIC INDUSTRIES</a>     |
| 311P409-3S-B-12                                                                                                  | 863025SNMBL                                     | QRN 93004     | <a href="#">SOURIAU, AN EATON COMPANY</a> |
| 311P409-3S-B-12                                                                                                  | 206801-2                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-3S-B-12                                                                                                  | C115370-1505                                    | 24308-3535-12 | <a href="#">C&amp;K CONNECT</a>           |
| 311P409-3S-B-15                                                                                                  | SND25F00200G-1082.24<br>SND25S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-3S-B-15                                                                                                  | 206801-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-4P-B-12                                                                                                  | DCMA37NMBK47FO                                  | QRN 94008     | ITT CANNON                                |
| 311P409-4P-B-12                                                                                                  | SND37M0000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-4P-B-12                                                                                                  | 863037PNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P409-4P-B-12                                                                                                  | 206802-2                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-4P-B-12                                                                                                  | C115370-1506                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P409-4P-B-15                                                                                                  | SND37M00200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-4P-B-15                                                                                                  | 206802-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-4S-B-12                                                                                                  | DCMA37SNMBK47FO                                 | QRN 94008     | ITT CANNON                                |
| 311P409-4S-B-12                                                                                                  | SND37F0000G-1082.24<br>SND37S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-4S-B-12                                                                                                  | 863037SNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P409-4S-B-12                                                                                                  | 206803-2                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-4S-B-12                                                                                                  | C115370-1507                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P409-4S-B-15                                                                                                  | SND37F00200G-1082.24<br>SND37S00200G-1082.24 1/ | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-4S-B-15                                                                                                  | 206803-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-5P-B-12                                                                                                  | DDMA50PNMBK47FO                                 | QRN 94008     | ITT CANNON                                |
| 311P409-5P-B-12                                                                                                  | SND50M0000G-1082.24                             | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-5P-B-12                                                                                                  | 863050PNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY                 |
| 311P409-5P-B-12                                                                                                  | 206804-2                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-5P-B-12                                                                                                  | C115370-1508                                    | 24308-3535-12 | C&K CONNECT                               |
| 311P409-5P-B-15                                                                                                  | SND50M00200G-1082.24                            | QRN 94007     | POSITRONIC INDUSTRIES                     |
| 311P409-5P-B-15                                                                                                  | 206804-1                                        | CTL5066-027   | TE CONNECTIVITY                           |
| 311P409-5S-B-12                                                                                                  | DDMA50SNMBK47FO                                 | QRN 94008     | ITT CANNON                                |

| GSFC <a href="#">S-311-P-4/09</a> , Connector, Electrical, Polarized Shell, Rack and Panel, For Space Flight Use |                                                 |               |                                 |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------|---------------------------------|
| Procurement PIN                                                                                                  | Manufacturer Similar PIN                        | Test Report   | Manufacturer                    |
| 311P409-5S-B-12                                                                                                  | SND50F0000G-1082.24<br>SND50S0000G-1082.24 1/   | QRN 94007     | POSITRONIC INDUSTRIES           |
| 311P409-5S-B-12                                                                                                  | 863050SNMBL                                     | QRN 93004     | SOURIAU, AN EATON COMPANY       |
| 311P409-5S-B-12                                                                                                  | 206805-2                                        | CTL5066-027   | TE CONNECTIVITY                 |
| 311P409-5S-B-12                                                                                                  | C115370-1509                                    | 24308-3535-12 | <a href="#">C&amp;K CONNECT</a> |
| 311P409-5S-B-15                                                                                                  | SND50F00200G-1082-24<br>SND50S00200G-1082-24 1/ | QRN 94007     | POSITRONIC INDUSTRIES           |
| 311P409-5S-B-15                                                                                                  | 206805-1                                        | CTL5066-027   | TE CONNECTIVITY                 |

/1 "Parts with either the split tine socket construction (i.e., "F" designator) or Posiband™ napkin spring construction (i.e., "S" designator) are both qualified. However, for future procurements of these items, Positronic is discontinuing use of split tine sockets in favor of Posiband™ sockets only."

| GSFC <a href="#">S-311-P-4/10</a> , Contacts, Electrical, Crimp Style, Size 20 |                          |             |                                           |
|--------------------------------------------------------------------------------|--------------------------|-------------|-------------------------------------------|
| Procurement PIN                                                                | Manufacturer Similar PIN | Test Report | Manufacturer                              |
| G10P1                                                                          | 330-5291-037             | QRN 94008   | <a href="#">ITT CANNON</a>                |
| G10P1                                                                          | MC6020D-50-1202.4        | QRN 94007   | <a href="#">POSITRONIC INDUSTRIES</a>     |
| G10P1                                                                          | 340100501B               | QRN 93004   | <a href="#">SOURIAU, AN EATON COMPANY</a> |
| G10P1                                                                          | 205089-4                 | CTL5064-057 | <a href="#">TE CONNECTIVITY</a>           |
| G10S1                                                                          | 031-1007-052             | QRN 94008   | ITT CANNON                                |
| G10S1                                                                          | FC6020D-50-1202.4        | QRN 94007   | POSITRONIC INDUSTRIES                     |
| G10S1                                                                          | 340100502B               | QRN 93004   | SOURIAU, AN EATON COMPANY                 |
| G10S1                                                                          | 206793-1                 | CTL5064-057 | TE CONNECTIVITY                           |
| G10S2                                                                          | FC6020M2-GSFC            | 00434621.AA | POSITRONIC INDUSTRIES                     |

| GSFC <a href="#">S-311-P-768</a> , Connector, Electrical, Miniature, Circular, Low Outgassing [ Amphenol(453) suffix],General Specification |                          |             |                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|------------------------------------|
| Procurement PIN                                                                                                                             | Manufacturer Similar PIN | Test Report | Manufacturer                       |
| JT****_**_*** (453)                                                                                                                         | JT SERIES                | QRN 94003   | <a href="#">AMPHENOL AEROSPACE</a> |
| LJT****_**_*** (453)                                                                                                                        | LJT SERIES               | QRN 94003   | AMPHENOL AEROSPACE                 |
| PTS**DR***_**** (453)                                                                                                                       | PTS-DR SERIES            | QRN 94003   | AMPHENOL AEROSPACE                 |
| TV****_**_*** (453)                                                                                                                         | TV SERIES                | QRN 94003   | AMPHENOL SEROSPACE                 |

| GSFC <a href="#">S-311-P-822</a> , Connectors, PWB, 2 mm cPCITM Style, High Reliability |                            |             |                                                |
|-----------------------------------------------------------------------------------------|----------------------------|-------------|------------------------------------------------|
| Procurement PIN                                                                         | Manufacturer Similar PIN   | Test Report | Manufacturer                                   |
| 311P822 MC-110-AG-D4                                                                    | Not available              | 204287      | <a href="#">SMITHS (FORMERLY HYPERTRONICS)</a> |
| 311P822 MC-110-AS-D4                                                                    | 822 MC-110-AS-D4-S12-14-8G | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822 MC-110-BG-D4                                                                    | Not available              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822 MC-110-BS-D4                                                                    | 822 MC-110-BS-D4-S12-14-8G | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-BPF                                                                             | T-2066                     | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-DCF                                                                             | T-2082                     | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FA-095-B                                                                        | 822-FA-095-B               | 204287      | <a href="#">SMITHS (FORMERLY HYPERTRONICS)</a> |
| 311P822-FA-110-A                                                                        | 822-FA-110-A               | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FA-110-B                                                                        | 822-FA-110-B               | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-095-BG-D                                                                     | 822-FC-095-BG-D-S2-14-8G   | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-095-BG-D2                                                                    | 822-FC-095-BG-D2-S2-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-095-BG-D4                                                                    | 822-FC-095-BG-D4-S2-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-095-BS-D                                                                     | 822-FC-095-BS-D-S12-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-095-BS-D2                                                                    | 822-FC-095-BS-D2-S12-14-8G | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-095-BS-D4                                                                    | 822-FC-095-BS-D4-S12-14-8G | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-AG-D                                                                     | 822-FC-110-AG-D-S2-14-8G   | 204287      | <a href="#">SMITHS (FORMERLY HYPERTRONICS)</a> |
| 311P822-FC-110-AG-D2                                                                    | 822-FC-110-AG-D2-S2-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-AG-D4                                                                    | 822-FC-110-AG-D4-S2-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-AS-D                                                                     | 822-FC-110-AS-D-S12-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-AS-D2                                                                    | 822-FC-110-AS-D2-S12-14-8G | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-AS-D4                                                                    | 822-FC-110-AS-D4-S12-14-8G | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-BG-D                                                                     | 822-FC-110-BG-D-S2-14-8G   | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-BG-D2                                                                    | 822-FC-110-BG-D2-S2-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-BG-D4                                                                    | 822-FC-110-BG-D4-S2-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-BS-D                                                                     | 822-FC-110-BS-D-S12-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-BS-D2                                                                    | 822-FC-110-BS-D2-S12-14-8G | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FC-110-BS-D4                                                                    | 822-FC-110-BS-D4-S12-14-8G | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FFA-095-B                                                                       | 822-FFA-095-B              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FFA-110-A                                                                       | 822-FFA-110-A              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FFA-110-B                                                                       | 822-FFA-110-B              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-01                                                                           | ZK2000-001-01              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-03                                                                           | ZK2000-001-03              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-04                                                                           | ZK2000-001-04              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-05                                                                           | ZK2000-001-05              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-07                                                                           | ZK2000-001-07              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |

| GSFC <a href="#">S-311-P-822</a> , Connectors, PWB,2 mm cPCITM Style, High Reliability |                            |             |                                                |
|----------------------------------------------------------------------------------------|----------------------------|-------------|------------------------------------------------|
| Procurement PIN                                                                        | Manufacturer Similar PIN   | Test Report | Manufacturer                                   |
| 311P822-FK-08                                                                          | ZK2000-001-08              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-14                                                                          | ZK2000-001-14              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-16                                                                          | ZK2000-001-16              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-19                                                                          | ZK2000-001-19              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-21                                                                          | ZK2000-001-21              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-22                                                                          | ZK2000-001-22              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-25                                                                          | ZK2000-001-25              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-27                                                                          | ZK2000-001-27              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-29                                                                          | ZK2000-001-29              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-31                                                                          | ZK2000-001-31              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-33                                                                          | ZK2000-001-33              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-35                                                                          | ZK2000-001-35              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-37                                                                          | ZK2000-001-37              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-59                                                                          | ZK2000-001-59              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-61                                                                          | ZK2000-001-61              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-FK-69                                                                          | ZK2000-001-69              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MA-095-B                                                                       | 822-MA-095-B               | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MA-110-A                                                                       | 822-MA-110-A               | 204287      | <a href="#">SMITHS (FORMERLY HYPERTRONICS)</a> |
| 311P822-MA-110-B                                                                       | 822-MA-110-B               | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MC-095-BG-D                                                                    | Not available              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MC-095-BG-D4                                                                   | Not available              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MC-095-BS-D                                                                    | 822-MC-095-BS-D-S12-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MC-095-BS-D4                                                                   | 822-MC-095-BS-D4-S12-14-8G | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MC-110-AG-D                                                                    | Not available              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MC-110-AS-D                                                                    | 822-MC-110-AS-D-S12-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MC-110-BG-D                                                                    | Not available              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MC-110-BS-D                                                                    | 822-MC-110-BS-D-S12-14-8G  | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MK-01                                                                          | ZK2000-002-01              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MK-03                                                                          | ZK2000-002-03              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MK-04                                                                          | ZK2000-002-04              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MK-05                                                                          | ZK2000-002-05              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MK-07                                                                          | ZK2000-002-07              | 204287      | <a href="#">SMITHS (FORMERLY HYPERTRONICS)</a> |
| 311P822-MK-08                                                                          | ZK2000-002-08              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MK-14                                                                          | ZK2000-002-14              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |
| 311P822-MK-16                                                                          | ZK2000-002-16              | 204287      | SMITHS (FORMERLY HYPERTRONICS)                 |

| GSFC <a href="#">S-311-P-822</a> , Connectors, PWB,2 mm cPCITM Style, High Reliability |                          |             |                                |
|----------------------------------------------------------------------------------------|--------------------------|-------------|--------------------------------|
| Procurement PIN                                                                        | Manufacturer Similar PIN | Test Report | Manufacturer                   |
| 311P822-MK-19                                                                          | ZK2000-002-19            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-21                                                                          | ZK2000-002-21            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-22                                                                          | ZK2000-002-22            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-25                                                                          | ZK2000-002-25            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-27                                                                          | ZK2000-002-27            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-29                                                                          | ZK2000-002-29            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-31                                                                          | ZK2000-002-31            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-33                                                                          | ZK2000-002-33            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-35                                                                          | ZK2000-002-35            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-37                                                                          | ZK2000-002-37            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-59                                                                          | ZK2000-002-59            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-61                                                                          | ZK2000-002-61            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |
| 311P822-MK-69                                                                          | ZK2000-002-69            | 204287      | SMITHS (FORMERLY HYPERTRONICS) |

### 5.3 RELAYS

| GSFC <a href="#">S-311-P-754/01</a> Relays, Electromagnetic, Hermetically Sealed, 2PDT (2C), Latching, Low Level to 1 Ampere (TO-5 Enclosure) |                          |              |                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|---------------------------------|
| Procurement PIN                                                                                                                               | Manufacturer Similar PIN | Test Report  | Manufacturer                    |
| G311P754/01-001                                                                                                                               | J422-6WM                 | QPDSIS-39016 | <a href="#">TELEDYNE RELAYS</a> |
| G311P754/01-002                                                                                                                               | J422-9WM                 | QPDSIS-39016 | TELEDYNE RELAYS                 |
| G311P754/01-003                                                                                                                               | J422-12WM                | QPDSIS-39016 | TELEDYNE RELAYS                 |
| G311P754/01-004                                                                                                                               | J422-18WM                | QPDSIS-39016 | TELEDYNE RELAYS                 |
| G311P754/01-005                                                                                                                               | J422-26WM                | QPDSIS-39016 | TELEDYNE RELAYS                 |

| GSFC <a href="#">S-311-P-754/02</a> , Relays, Electromagnetic, Hermetically Sealed, 2PDT (2C), Latching, Low Level to 1 Ampere, Internal Diode for Coil Transients (TO-5 Enclosure) |                          |              |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|-----------------|
| Procurement PIN                                                                                                                                                                     | Manufacturer Similar PIN | Test Report  | Manufacturer    |
| G311P754/02-001                                                                                                                                                                     | J422D5WM                 | QPDSIS-39016 | TELEDYNE RELAYS |
| G311P754/02-002                                                                                                                                                                     | J422D6WM                 | QPDSIS-39016 | TELEDYNE RELAYS |
| G311P754/02-003                                                                                                                                                                     | J422D9WM                 | QPDSIS-39016 | TELEDYNE RELAYS |
| G311P754/02-004                                                                                                                                                                     | J422D12WM                | QPDSIS-39016 | TELEDYNE RELAYS |
| G311P754/02-005                                                                                                                                                                     | J422D18WM                | QPDSIS-39016 | TELEDYNE RELAYS |
| G311P754/02-006                                                                                                                                                                     | J422D26WM                | QPDSIS-39016 | TELEDYNE RELAYS |

| GSFC <a href="#">S-311-P-754/03</a> , Relays, Electromagnetic, Hermetically Sealed, 2PDT (2C), Latching, Low Level to 1 Ampere (TO-5 Enclosure) |                          |              |                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|--------------------------------------|
| Procurement PIN                                                                                                                                 | Manufacturer Similar PIN | Test Report  | Manufacturer                         |
| G311P754/03-001                                                                                                                                 | J412-6WM                 | QPDSIS-39016 | TELEDYNE RELAYS                      |
| G311P754/03-001                                                                                                                                 | To be assigned           | QPDSIS-39016 | <a href="#">TE CONNECTIVITY- CII</a> |
| G311P754/03-002                                                                                                                                 | J412-9WM                 | QPDSIS-39016 | TELEDYNE RELAYS                      |
| G311P754/03-002                                                                                                                                 | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII                 |
| G311P754/03-003                                                                                                                                 | J412-12WM                | QPDSIS-39016 | TELEDYNE RELAYS                      |
| G311P754/03-003                                                                                                                                 | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII                 |
| G311P754/03-004                                                                                                                                 | J412-18WM                | QPDSIS-39016 | TELEDYNE RELAYS                      |
| G311P754/03-004                                                                                                                                 | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII                 |
| G311P754/03-005                                                                                                                                 | J412-26WM                | QPDSIS-39016 | TELEDYNE RELAYS                      |
| G311P754/03-005                                                                                                                                 | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII                 |

| GSFC <a href="#">S-311-P-754/04</a> , Relays, Electromagnetic, Hermetically Sealed, 2PDT (2C), Low Level to 1 Ampere, Internal Diode for Coil Transients, (TO-5 Enclosure) |                          |              |                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|--------------------------------------|
| Procurement PIN                                                                                                                                                            | Manufacturer Similar PIN | Test Report  | Manufacturer                         |
| G311P754/04-001                                                                                                                                                            | J412D-6M                 | QPDSIS-39016 | <a href="#">TELEDYNE RELAYS</a>      |
| G311P754/04-001                                                                                                                                                            | MACD-8027                | QPDSIS-39016 | <a href="#">TE CONNECTIVITY- CII</a> |
| G311P754/04-002                                                                                                                                                            | J412D-9M                 | QPDSIS-39016 | TELEDYNE RELAYS                      |
| G311P754/04-002                                                                                                                                                            | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII                 |
| G311P754/04-003                                                                                                                                                            | J412D-12M                | QPDSIS-39016 | TELEDYNE RELAYS                      |
| G311P754/04-003                                                                                                                                                            | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII                 |
| G311P754/04-004                                                                                                                                                            | J412D-18M                | QPDSIS-39016 | TELEDYNE RELAYS                      |
| G311P754/04-004                                                                                                                                                            | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII                 |
| G311P754/04-005                                                                                                                                                            | J412D-26M                | QPDSIS-39016 | TELEDYNE RELAYS                      |
| G311P754/04-005                                                                                                                                                            | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII                 |

| GSFC <a href="#">S-311-P-754/06</a> , Relays, Electromagnetic, Hermetically Sealed, 2PDT (2C), Permanent Magnet Drive, 10 Ampere, All Welded |                          |              |                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|----------------------------------------------|
| Procurement PIN                                                                                                                              | Manufacturer Similar PIN | Test Report  | Manufacturer                                 |
| G311P754/06-001                                                                                                                              | BR246-320B2-28V-023M     | QPDSIS-83536 | <a href="#">MICROCHIP (FORMERLY BABCOCK)</a> |
| G311P754/06-001                                                                                                                              | E2100403ATM              | QPDSIS-83536 | <a href="#">DEUTSCH RELAYS</a>               |
| G311P754/06-001                                                                                                                              | J-D2A-300M               | QPDSIS-83536 | <a href="#">LEACH INTERNATIONAL</a>          |
| G311P754/06-002                                                                                                                              | BR246-320A2-28V-024M     | QPDSIS-83536 | MICROCHIP (FORMERLY BABCOCK)                 |
| G311P754/06-002                                                                                                                              | E2100403BGM              | QPDSIS-83536 | DEUTSCH RELAYS                               |
| G311P754/06-002                                                                                                                              | J-D4A-300M               | QPDSIS-83536 | LEACH INTERNATIONAL                          |

| GSFC <a href="#">S-311-P-754/07</a> , Relays, Electromagnetic, Hermetically Sealed, 2PDT (2C), Low Level to 2 Amperes ( 0.150 inch Terminal Spacing) |                          |              |                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|----------------------|
| Procurement PIN                                                                                                                                      | Manufacturer Similar PIN | Test Report  | Manufacturer         |
| G311P754/07-001                                                                                                                                      | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII |
| G311P754/07-002                                                                                                                                      | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII |
| G311P754/07-003                                                                                                                                      | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII |
| G311P754/07-056                                                                                                                                      | 3SBC2203A2               |              | TE CONNECTIVITY– CII |

| GSFC <a href="#">S-311-P-754/08</a> , Relays, Electromagnetic, Hermetically Sealed, 4PDT (4C), Latching, Low Level to 2 Amperes ( 0.150 inch Terminal Spacing) |                          |              |                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|--------------------------------------|
| Procurement PIN                                                                                                                                                | Manufacturer Similar PIN | Test Report  | Manufacturer                         |
| G311P754/08-001                                                                                                                                                | To be assigned           | QPDSIS-39016 | <a href="#">TE CONNECTIVITY- CII</a> |
| G311P754/08-002                                                                                                                                                | 3SBM1264A2               | QPDSIS-39016 | TE CONNECTIVITY– CII                 |
| G311P754/08-003                                                                                                                                                | 3SBM1246A2               | QPDSIS-39016 | TE CONNECTIVITY– CII                 |

| GSFC <a href="#">S-311-P-754/09</a> , Relays, Electromagnetic, Hermetically Sealed, 4PDT (4C), Low Level to 2 Amperes ( 0.150 inch Terminal Spacing) |                          |              |                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|----------------------------------------------|
| Procurement PIN                                                                                                                                      | Manufacturer Similar PIN | Test Report  | Manufacturer                                 |
| G311P754/09-001                                                                                                                                      | BR150-28C1-6V-005M       | QPDSIS-39016 | <a href="#">MICROCHIP (FORMERLY BABCOCK)</a> |
| G311P754/09-002                                                                                                                                      | BR150-116C1-12V-007M     | QPDSIS-39016 | MICROCHIP (FORMERLY BABCOCK)                 |
| G311P754/09-003                                                                                                                                      | BR150-720C1-26V-002M     | QPDSIS-39016 | MICROCHIP (FORMERLY BABCOCK)                 |
| G311P754/09-001                                                                                                                                      | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII                         |
| G311P754/09-002                                                                                                                                      | To be assigned           | QPDSIS-39016 | TE CONNECTIVITY– CII                         |
| G311P754/09-003                                                                                                                                      | 3SBH1347A2               | QPDSIS-39016 | TE CONNECTIVITY– CII                         |

| GSFC <a href="#">S-311-P-754/10</a> , Relays, Electromagnetic, Hermetically Sealed, 4PDT (4C), Permanent Magnet Drive, 10 Amperes, All Welded |                          |              |                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|-------------------------------------|
| Procurement PIN                                                                                                                               | Manufacturer Similar PIN | Test Report  | Manufacturer                        |
| G311P754/10-001                                                                                                                               | BR230-290B2-28V-021M     | QPDSIS-83536 | MICROCHIP (FORMERLY BABCOCK)        |
| G311P754/10-001                                                                                                                               | E4100402ATM              | QPDSIS-83536 | <a href="#">DEUTSCH RELAYS</a>      |
| G311P754/10-001                                                                                                                               | K-D2A-300M               | QPDSIS-83536 | <a href="#">LEACH INTERNATIONAL</a> |
| G311P754/10-002                                                                                                                               | BR230-290A2-28V-022M     | QPDSIS-83536 | MICROCHIP (FORMERLY BABCOCK)        |
| G311P754/10-002                                                                                                                               | E4100402BGM              | QPDSIS-83536 | DEUTSCH RELAYS                      |
| G311P754/10-002                                                                                                                               | K-D4A-300M               | QPDSIS-83536 | LEACH INTERNATIONAL                 |

| GSFC <a href="#">S-311-P-754/11</a> , Relays, Electromagnetic, Hermetically Sealed, 3PDT (3C), Latching, 25 Amperes, All Welded |                          |             |                              |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|------------------------------|
| Procurement PIN                                                                                                                 | Manufacturer Similar PIN | Test Report | Manufacturer                 |
| G311P754/11-001                                                                                                                 | BR236-450B2-28V-1        | QPDSIS-6106 | MICROCHIP (FORMERLY BABCOCK) |
| G311P754/11-001                                                                                                                 | EL3250402AT              | QPDSIS-6106 | DEUTSCH RELAYS               |
| G311P754/11-001                                                                                                                 | KCL-D2A-002              | QPDSIS-6106 | LEACH INTERNATIONAL          |
| G311P754/11-002                                                                                                                 | BR236-450A2-28V-1        | QPDSIS-6106 | MICROCHIP (FORMERLY BABCOCK) |
| G311P754/11-002                                                                                                                 | EL3250402BG              | QPDSIS-6106 | DEUTSCH RELAYS               |
| G311P754/11-002                                                                                                                 | KCL-D4A-002              | QPDSIS-6106 | LEACH INTERNATIONAL          |

## 5.4 RESISTORS

| GSFC <a href="#">S-311-P-672</a> Resistor, Fixed, High Voltage ( Victoreen Mini-Mox ) |                          |             |                        |
|---------------------------------------------------------------------------------------|--------------------------|-------------|------------------------|
| Procurement PIN                                                                       | Manufacturer Similar PIN | Test Report | Manufacturer           |
| G311P672-1-*****                                                                      | MO* 400*****             | QRN 92003   | <a href="#">OHMITE</a> |
| G311P672-2-*****                                                                      | MO* 750*****             | QRN 92003   | OHMITE                 |
| G311P673-3-*****                                                                      | MO* 1125*****            | QRN 92003   | OHMITE                 |

| GSFC <a href="#">S-311-P-683</a> Resistor, Fixed, Precision High Voltage (Caddock Type MG and HG) |                          |             |                                     |
|---------------------------------------------------------------------------------------------------|--------------------------|-------------|-------------------------------------|
| Procurement PIN                                                                                   | Manufacturer Similar PIN | Test Report | Manufacturer                        |
| G311P683-650*****                                                                                 | MG650-*****_***          | QRN 92004   | <a href="#">CADDOCK ELECTRONICS</a> |
| G311P683-655*****                                                                                 | MG655-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |
| G311P683-660*****                                                                                 | MG660-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |
| G311P683-680*****                                                                                 | MG680-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |
| G311P683-710*****                                                                                 | MG710-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |
| G311P683-714*****                                                                                 | MG714-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |
| G311P683-715*****                                                                                 | MG715-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |
| G311P683-716*****                                                                                 | MG716-*****_***          | SR04-0405   | CADDOCK ELECTRONICS                 |
| G311P683-720*****                                                                                 | MG720-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |
| G311P683-721*****                                                                                 | MG721-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |
| G311P683-725*****                                                                                 | MG725-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |
| G311P683-730*****                                                                                 | MG730-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |
| G311P683-750*****                                                                                 | MG750-*****_***          | SR04-0405   | CADDOCK ELECTRONICS                 |
| G311P683-780*****                                                                                 | MG780-*****_***          | QRN 92004   | CADDOCK ELECTRONICS                 |

| GSFC <a href="#">S-311-P-741</a> Resistor, Fixed, Low TC, Precision, High Voltage (Caddock Type TG) |                          |             |                                     |
|-----------------------------------------------------------------------------------------------------|--------------------------|-------------|-------------------------------------|
| Procurement PIN                                                                                     | Manufacturer Similar PIN | Test Report | Manufacturer                        |
| G311P741-931****F                                                                                   | TG931-***-1%             | SR04-0405   | <a href="#">CADDOCK ELECTRONICS</a> |
| G311P741-950****F                                                                                   | TG950-****-1%            | QRN 92002   | CADDOCK ELECTRONICS                 |
| G311P741-950****G                                                                                   | TG950-****-2%            | QRN 92002   | CADDOCK ELECTRONICS                 |
| G311P741-980****F                                                                                   | TG980-****-1%            | SR04-0405   | CADDOCK ELECTRONICS                 |

## 5.5 THERMISTORS

| GSFC <a href="#">S-311-P-18</a> , Thermistor, (Thermally Sensitive Resistor), Insulated and Uninsulated, Negative TC |                          |               |                                       |
|----------------------------------------------------------------------------------------------------------------------|--------------------------|---------------|---------------------------------------|
| Procurement PIN 2/                                                                                                   | Manufacturer Similar PIN | Test Report   | Manufacturer                          |
| 311P18-01A***                                                                                                        | MEAS44901A***            | MIL-PRF-23648 | <a href="#">TE SENSORS (2) (3) 3/</a> |
| 311P18-01A***                                                                                                        | 311P18-01A***            | MIL-PRF-23648 | <a href="#">QTI</a>                   |
| 311P18-01S***                                                                                                        | MEAS44901S***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-01S***                                                                                                        | 311P18-01S***            | MIL-PRF-23648 | QTI                                   |
| 311P18-01T*** 1/                                                                                                     | MEAS44901T*** 1/         | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-01T***                                                                                                        | 311P18-01T***            | MIL-PRF-23648 | QTI                                   |
| 311P18-02A***                                                                                                        | MEAS44902A***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-02A***                                                                                                        | 311P18-02A***            | MIL-PRF-23648 | QTI                                   |
| 311P18-02S***                                                                                                        | MEAS44902S***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-02S***                                                                                                        | 311P18-02S***            | MIL-PRF-23648 | QTI                                   |
| 311P18-02T*** 1/                                                                                                     | MEAS44902T*** 1/         | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-02T***                                                                                                        | 311P18-02T***            | MIL-PRF-23648 | QTI                                   |
| 311P18-03A***                                                                                                        | MEAS44903A***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-03A***                                                                                                        | 311P18-03A***            | MIL-PRF-23648 | QTI                                   |
| 311P18-03S***                                                                                                        | MEAS44903S***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-03S***                                                                                                        | 311P18-03S***            | MIL-PRF-23648 | QTI                                   |
| 311P18-03T*** 1/                                                                                                     | MEAS44903T*** 1/         | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-03T***                                                                                                        | 311P18-03T***            | MIL-PRF-23648 | QTI                                   |
| 311P18-04A***                                                                                                        | MEAS44904A***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-04A***                                                                                                        | 311P18-04A***            | MIL-PRF-23648 | QTI                                   |
| 311P18-04S***                                                                                                        | MEAS44904S***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-04S***                                                                                                        | 311P18-04S***            | MIL-PRF-23648 | QTI                                   |
| 311P18-04T*** 1/                                                                                                     | MEAS44904T*** 1/         | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-04T***                                                                                                        | 311P18-04T***            | MIL-PRF-23648 | QTI                                   |
| 311P18-05A***                                                                                                        | MEAS44905A***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-05A***                                                                                                        | 311P18-05A***            | MIL-PRF-23648 | QTI                                   |
| 311P18-05S***                                                                                                        | MEAS44905S***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-05S***                                                                                                        | 311P18-05S***            | MIL-PRF-23648 | QTI                                   |
| 311P18-05T*** 1/                                                                                                     | MEAS44905T*** 1/         | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-05T***                                                                                                        | 311P18-05T***            | MIL-PRF-23648 | QTI                                   |

| GSFC <a href="#">S-311-P-18</a> , Thermistor, (Thermally Sensitive Resistor), Insulated and Uninsulated, Negative TC |                          |               |                                       |
|----------------------------------------------------------------------------------------------------------------------|--------------------------|---------------|---------------------------------------|
| Procurement PIN 2/                                                                                                   | Manufacturer Similar PIN | Test Report   | Manufacturer                          |
| 311P18-06A***                                                                                                        | MEAS44906A***            | MIL-PRF-23648 | <a href="#">TE SENSORS</a> (2) (3) 3/ |
| 311P18-06A***                                                                                                        | 311P18-06A***            | MIL-PRF-23648 | <a href="#">QTI</a>                   |
| 311P18-06S***                                                                                                        | MEAS44906S***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-06S***                                                                                                        | 311P18-06S***            | MIL-PRF-23648 | QTI                                   |
| 311P18-06T*** 1/                                                                                                     | MEAS44906T*** 1/         | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-06T***                                                                                                        | 311P18-06T***            | MIL-PRF-23648 | QTI                                   |
| 311P18-07A***                                                                                                        | MEAS44907A***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-07A***                                                                                                        | 311P18-07A***            | MIL-PRF-23648 | QTI                                   |
| 311P18-07S***                                                                                                        | MEAS44907S***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-07S***                                                                                                        | 311P18-07S***            | MIL-PRF-23648 | QTI                                   |
| 311P18-07T*** 1/                                                                                                     | MEAS44907T*** 1/         | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-07T***                                                                                                        | 311P18-07T***            | MIL-PRF-23648 | QTI                                   |
| 311P18-08A***                                                                                                        | MEAS44908A***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-08A***                                                                                                        | 311P18-08A***            | MIL-PRF-23648 | QTI                                   |
| 311P18-08S***                                                                                                        | MEAS44908S***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-08S***                                                                                                        | 311P18-08S***            | MIL-PRF-23648 | QTI                                   |
| 311P18-08T*** 1/                                                                                                     | MEAS44908T*** 1/         | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-08T***                                                                                                        | 311P18-08T***            | MIL-PRF-23648 | QTI                                   |
| 311P18-09A***                                                                                                        | MEAS44909A***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-09S***                                                                                                        | MEAS44909S***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-09T*** 1/                                                                                                     | MEAS44909T*** 1/         | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-10A***                                                                                                        | MEAS44910E***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-10S***                                                                                                        | MEAS44910S***            | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |
| 311P18-10T*** 1/                                                                                                     | MEAS44910T*** 1/         | MIL-PRF-23648 | TE SENSORS (2) (3) 3/                 |

**Note:**  
1/ Parts with Lot Date Codes prior to Jul 15, 2011 are not preferred for flight use. Wire has been changed to SAE AS22759/22.  
2/ Lead codes "E" and "N" were removed from S-311-P-18 revision M dated 06/20/2024. There are no longer any QPLD sources for these lead codes.  
3/ Measurement Specialties, a TE Connectivity Company closed facility (1) Dayton circa 2016 and relocated to facility (2) Andover which also closed in 2024. Facility (2) will remain listed for a period of time to allow shipment of finished goods inventory. TE Sensors facility (3) Hampton became a qualified source in May 2024.

| GSFC <a href="#">S-311-P-827</a> , Thermistor, (Thermally Sensitive Resistor), Chip, Negative Temperature Coefficient or Positive Temperature Coefficient |                          |               |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------|---------------------|
| Procurement PIN                                                                                                                                           | Manufacturer Similar PIN | Test Report   | Manufacturer        |
| 311P827-01S5002                                                                                                                                           | QT0805Z-503F             | M206280       | <a href="#">QTI</a> |
| 311P827-31S2001                                                                                                                                           | QT0805-202F              | TRD: 08/10/09 | QTI                 |

## 5.6 THERMOFOIL HEATERS

| GSFC <a href="#">S-311-P-079</a> , Thermofoil Heater            |                                                                         |             |                                          |
|-----------------------------------------------------------------|-------------------------------------------------------------------------|-------------|------------------------------------------|
| Procurement PIN                                                 | Manufacturer Similar PIN                                                | Test Report | Manufacturer                             |
| HK2*****                                                        | Custom manufactured to the GSFC specification.                          | QRN 92005   | <a href="#">MINCO PRODUCTS</a>           |
| TBA                                                             | Procure per Tayco specification TPS-5010, compliant to GSFC S-311-P-079 | TR2008      | TAYCO ENGINEERING, INC.                  |
| 20067, 20068 or TBD – unique per model as agreed with customer. | Custom manufactured and tested to the GSFC specification                | PR092962    | <a href="#">All Flex Solutions, Inc.</a> |

| GSFC <a href="#">S-311-P-841</a> , Thermofoil Heater, All-Polyimide, Space Applications |                                                           |             |                                      |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------|--------------------------------------|
| Procurement PIN                                                                         | Manufacturer Similar PIN                                  | Test Report | Manufacturer                         |
| FR*****                                                                                 | Custom manufactured to the GSFC S-311-P-841 specification | W.O. 53439  | <a href="#">Fralock</a>              |
| HAP*****                                                                                | Custom manufactured to the GSFC S-311-P-841 specification | IFS 2652382 | <a href="#">Minco Products, Inc.</a> |

## 5.7 THERMOSTATS

| GSFC <a href="#">S-311-641</a> , Thermostats |                          |                 |                                          |
|----------------------------------------------|--------------------------|-----------------|------------------------------------------|
| Procurement PIN                              | Manufacturer Similar PIN | Test Report     | Manufacturer                             |
| G311P641/02*****                             | M2 Series                | QPL-24236-35 1/ | <a href="#">SENSATA TECHNOLOGIES INC</a> |
| G311P641/03*****                             | 700 Series               | QPL-24236-35 1/ | <a href="#">Honeywell Aerospace</a>      |
| G311P641/04*****                             | 270 Series               | QPL-24236-35 1/ | <a href="#">Honeywell Aerospace</a>      |
| G311P641/05*****                             | M1/11041 Series          | QPL-24236-35 1/ | <a href="#">SENSATA TECHNOLOGIES INC</a> |
| G311P641/06*****                             | 4BT Series               | QPL-24236-35 1/ | <a href="#">SENSATA TECHNOLOGIES INC</a> |
| G311P641/07*****                             | 3BT Series               | QPL-24236-35 1/ | <a href="#">SENSATA TECHNOLOGIES INC</a> |

**Note:**

1/ In addition to configuration, qualification to the temperature settings and contact action listed in the QPL is required.

## 6.0 CORPORATE OFFICE LISTING

Manufacturer: [All Flex Solutions, Inc.](#)  
Street Address: 1705 Cannon Lane  
City, State, Zip Code: Northfield, MN 55057  
Phone: (612) 999-2998  
Email: [rfq@allflexinc.com](mailto:rfq@allflexinc.com)  
CAGE Code: 0ZGB2

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Manufacturer: [Amphenol Aerospace](#)  
(Formerly Bendix Connectors Opns)  
Street Address: 40-60 Delaware Avenue  
City, State, Zip Code: Sidney NY 13838-1395  
Phone: (607) 563-5011  
CAGE Code: 77820

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Manufacturer: [Microchip](#)  
(Formerly Babcock, Inc.)  
Street Address: 11861 Western Avenue,  
City, State Zip Code: Garden Grove, CA 92841  
Phone: (714) 898-7112  
CAGE Code: 56623

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Manufacturer: [Caddock Electronics, Inc](#)  
Street Address: 17271 North Umpqua Hwy.  
City, State Zip Code: Roseburg, OR 97470-9422  
Phone: (541) 496-0700  
CAGE Code: 19647

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Manufacturer: [C&K Connect](#)  
Street Address: 2 rue Berthollet  
City, State Zip Code: 39100 Dole, France  
Phone: (617) 969-3700  
CAGE Code: FBHV6

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Manufacturer: [Deutsch Relays, Inc, a TE Connectivity Company](#)  
Street Address: 55 Engineers Road  
City, State, Zip Code: Hauppauge, NY 11788  
Phone: (631) 840-3224  
CAGE Code: 99699

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Manufacturer: [Fralock](#)  
Street Address: 28525 West Industry Drive  
City, State, Zip Code: Valencia, CA 91355  
Phone: (800) 372-5625  
CAGE Code: 51846

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Manufacturer: [Honeywell Aerospace](#)  
Street Address: 15001 N.E. 36th Street  
P.O. Box 97001  
City, State, Zip Code: Redmond, Washington 98073-9701  
Phone: (425) 885-8226  
CAGE Code: 0YFP0

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Manufacturer: [ITT Cannon](#)  
Street Address: 56 Technology Drive City,  
State, Zip Code: Irvine, CA 92618  
Phone: (800) 854-3028  
CAGE Code: 71468

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Manufacturer: [Leach International](#)  
Street Address: 6900 Orangethorpe Avenue  
City, State, Zip Code: Buena Park, CA 90620-1351  
Phone: (631) 244-1490  
CAGE Code: 58657

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Manufacturer: [Measurement Specialties Dayton](#) (1)  
*FACTORY CLOSED:* *No Longer a QPLD Supplier (see Hampton, VA location)*  
Street Address: 2670 Indian Ripple Road  
City, State, Zip Code: Dayton, OH 45440, USA  
Phone: (937) 427-1231, (800)747-5367

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Manufacturer: [Measurement Specialties Andover](#) (2)  
*FACTORY CLOSED:* *No Longer a QPLD Supplier (see Hampton, VA location)*  
Street Address: 1711 139th Lane NW  
City, State, Zip Code: Andover, MN 55304, USA  
Phone: (763) 689-4870, (800) 899-9783  
CAGE Code: 7DHL3

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Manufacturer: [Minco Products, Inc.](#)  
Street Address: 7300 Commerce Lane  
City, State, Zip Code: Minneapolis, MN 55432-3113  
Phone: (763) 571-3121  
Email: [info@minco.com](mailto:info@minco.com)  
CAGE Code: 09359

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Manufacturer: [Ohmite](#)  
(Formerly Victoreen, Inc)  
Street Address: 27501 Bella Vista Pkwy  
City, State, Zip Code: Warrenville, IL 60555  
Phone: (866) 964-6483, (847) 258-0300  
CAGE Code: 44655

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Manufacturer: [Positronic Industries, Inc, an Amphenol Company](#)  
Street Address: 1325 N Eldon Avenue  
City, State, Zip Code: Springfield, MO 65803-5618  
Phone: (417) 855-2030, (800) 641-4054  
CAGE Code: 28198

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Manufacturer: [Presidio Components, Inc.](#)  
Street Address: 7169 Construction Court  
City, State, Zip Code: San Diego, CA 92121 USA  
Phone: (858) 578-9390, (800) 722-9923  
CAGE Code: 60212

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Manufacturer: [QTI, a CTS Corporation](#)  
(Formerly Quality Thermistor, Inc. (QTI))  
Street Address: 2108 Century Way  
City, State, Zip Code: Boise, ID 83709  
Phone: (208) 377-3373, (800) 554-4784  
Email: [qtisales@thermistor.com](mailto:qtisales@thermistor.com), [appsupport@thermistor.com](mailto:appsupport@thermistor.com)  
CAGE Code: 56866

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Manufacturer: [Sensata Technologies Inc.](#)  
(Formerly Control Products of Texas Instruments)  
Street Address: 529 Pleasant Street  
City, State, Zip Code: Attleboro, MA, 02703 – 2421  
Phone: (508) 236-3528  
CAGE Code: 82647

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Manufacturer: [Smiths Interconnect](#)  
(Formerly Hypertronics)  
Street Address: 16 Brent Drive  
City, State, Zip Code: Hudson, MA 01749 USA  
Phone: (978) 568-0451, (800) 225-9228  
CAGE Code: 50541

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Manufacturer: [Souriau, an Eaton Company](#)  
(Formerly Framatome Connectors, Inc.)  
Street Address: 25 Grumbacher Road  
City, State, Zip Code: York, PA, 17406-8417  
Phone: (717) 718-2662  
CAGE Code: F0225

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Manufacturer: [Tayco Engineering, Inc.](#)  
Street Address: 10874 Hope Street  
City, State, Zip Code: Cypress, CA. 90630  
Phone: (714) 952-2240  
CAGE Code: 50422

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Manufacturer: [TE Connectivity](#)  
(Formerly Tyco Electronics/AMP, Inc.)  
Street Address: 2901 Fulling Mill Road  
City, State, Zip Code: Middletown, PA 17057-3163, US  
Plant Address: 1250 East Main Street, Mt Joy, PA 17522  
Phone: (800) 468-2023  
CAGE Code: 00779

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Manufacturer: [TE Sensors, a TE Connectivity Company](#)  
(Formerly Measurement Specialties) (3)  
Street Address: 1000 Lucas Way  
City, State, Zip Code: Hampton, VA 23666  
Phone: 757-766-1500  
CAGE Code: 0ZW31

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Manufacturer: [TE Connectivity - CII](#)  
Street Address: P.O. Box 520  
1396 Charlotte Highway  
City, State, Zip Code: Fairview, NC 28739  
Phone: (828) 338-1000, (800) 806-0480, (800) 522-6752  
CAGE Code: 58614

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Manufacturer: [Teledyne Relays](#)  
Street Address: 12525 Daphne Avenue  
City, State, Zip Code: Hawthorne, CA 90250  
Phone: (323) 777-0077, (800) 284-7007  
CAGE Code: 11532

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