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QUALIFIED

PARTS LIST

DIRECTORY

PARTS, PACKAGING, AND ASSEMBLY TECHNOLOGIES OFFICE
CODE 562
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

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:

Parts, Packaging, and Assembly Technologies Office
Code 562
NASA/Goddard Space Flight Center
Greenbelt, MD 20771-0001

Administrator:	Javad Shockri
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Fax:	301-286-9778
E-Mail:	javad.shockri-1@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 S-311-P-829 Capacitor, Ceramic, Multilayer Chip, Space Applications			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
G311P829**********	Custom manufactured to the GSFC specification.	QPDSIS-123	Presidio Components, Inc.

5.2 CONNECTORS

GSFC S-311-P-10, 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-77	QRN 94008	ITT CANNON
311P10-1P-B-12	SND9M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-1P-B-15	DEM-9P-NMB-76	QRN 94008	ITT CANNON
311P10-1P-B-15	SND9M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-1P-C-12	DEM-9P-NMC-77	QRN 94008	ITT CANNON
311P10-1P-C-12	SND9M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-1P-C-15	DEM-9P-NMC-76	QRN 94008	ITT CANNON
311P10-1P-C-15	SND9M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311p10-1S-B-12	DEM-9S-NMB-77	QRN 94008	ITT CANNON
311P10-1S-B-12	SND9F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-1S-B-15	DEM-9S-NMB-76	QRN 94008	ITT CANNON
311P10-1S-B-15	SND9F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-1S-C-12	DEM-9S-NMC-77	QRN 94008	ITT CANNON
311P10-1S-C-12	SND9F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-1S-C-15	DEM-9S-NMC-76	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-15	DAM-15P-NMB-76	QRN 94008	ITT CANNON
311P10-2P-B-15	SND15M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-2P-C-12	DAM-15P-NMC-77	QRN 94008	ITT CANNON
311P10-2P-C-12	SND15M2000G-182.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-2P-C-15	DAM-15P-NMC-76	QRN 94008	ITT CANNON
311P10-2S-B-12	DAM-15S-NMB-77	QRN 94008	ITT CANNON
311P10-2S-B-12	SND 15F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-2S-B-15	DAM-15S-NMB-76	QRN 94008	ITT CANNON
311P10-2S-B-15	SND15F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-2S-C-12	DAM-15S-NMC-77	QRN 94008	ITT CANNON
311P10-2S-C-12	SND15F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-2S-C-12	SND15M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-2S-C-15	DAM-15S-NMC-76	QRN 94008	ITT CANNON

GSFC S-311-P-10, Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P10-2S-C-15	SND15F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-3P-B-12	DBM-25P-NMB-77	QRN 94008	ITT CANNON
311P10-3P-B-12	SND25M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-3P-B-15	DBM-25P-NMB-76	QRN 94008	ITT CANNON
311P10-3P-B-15	SND25M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-3P-C-12	DBM-25P-NMC-77	QRN 94008	ITT CANNON
311P10-3P-C-12	SND25M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-3P-C-15	DBM-25P-NMC-76	QRN 94008	ITT CANNON
311P10-3P-C-15	SND25M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-3S-B-12	DBM-25S-NMB-77	QRN 94008	ITT CANNON
311P10-3S-B-12	SND25F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-3S-B-15	DBM-25S-NMB-76	QRN 94008	ITT CANNON
311P10-3S-B-15	SND25F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-3S-C-12	DBM-26S-NMC-77	QRN 94008	ITT CANNON
311P10-3S-C-12	SND25F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-3S-C-15	DBM-25S-NMC-76	QRN 94008	ITT CANNON
311P10-3S-C-15	SND25F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-4P-B-12	DCM-37P-NMB-77	QRN 94008	ITT CANNON
311P10-4P-B-12	SND37M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-4P-B-15	DCM-37P-NMB-76	QRN 94008	ITT CANNON
311P10-4P-B-15	SND37M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-4P-C-12	DCM-37P-NMC-77	QRN 94008	ITT CANNON
311P10-4P-C-12	SND37M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-4P-C-15	DCM-37P-NMC-76	QRN 94008	ITT CANNON
311P10-4P-C-15	SND37M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-4S-B-12	DCM-37S-NMB-77	QRN 94008	ITT CANNON
311P10-4S-B-12	SND37F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-4S-B-15	DCM-37S-NMB-76	QRN 94008	ITT CANNON
311P10-4S-B-15	SND37F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-4S-C-12	DCM-37S-NMC-77	QRN 94008	ITT CANNON
311P10-4S-C-12	SND37M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-4S-C-15	DCM-37S-NMC-76	QRN 94008	ITT CANNON
311P10-4S-C-15	SND37F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-5P-B-12	DDM-50P-NMB-77	QRN 94008	ITT CANNON
311P10-5P-B-12	SND50M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-5P-B-15	DDM-50P-NMB-76	QRN 94008	ITT CANNON
311P10-5P-B-15	SND50M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES

GSFC S-311-P-10, Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P10-5P-C-12	DDM-50P-NMC-77	QRN 94008	ITT CANNON
311P10-5P-C-12	SND50M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-5P-C-15	DDM-50P-NMC-76	QRN 94008	ITT CANNON
311P10-5P-C-15	SND50M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-5S-B-12	DDM-50S-NMB-77	QRN 94008	ITT CANNON
311P10-5S-B-12	SND50F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-5S-B-15	DDM-50S-NMB-76	QRN 94008	ITT CANNON
311P10-5S-B-15	SND50F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-5S-C-12	DDM-50S-NMC-77	QRN 94008	ITT CANNON
311P10-5S-C-12	SND50F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-5S-C-15	DDM-50S-NMC-76	QRN 94008	ITT CANNON
311P10-5S-C-15	SND50F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-6P-B-12	DEM-5W1P-NMB-77	QRN 94008	ITT CANNON
311P10-6P-B-12	SCBM5W1M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-6P-B-15	DEM-5W1P-NMB-76	QRN 94008	ITT CANNON
311P10-6P-B-15	SCBM5W1M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-6P-C-12	DEM-5W1P-NMC-77	QRN 94008	ITT CANNON
311P10-6P-C-12	SCBM5W1M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-6P-C-15	DEM-5W1P-NMC-76	QRN 94008	ITT CANNON
311P10-6P-C-15	SCBM5W1M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-6S-B-12	DEM-5W1S-NMB-77	QRN 94008	ITT CANNON
311P10-6S-B-12	SCBM5W1F200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-6S-B-15	DEM-5W1S-NMB-76	QRN 94008	ITT CANNON
311P10-6S-B-15	SCBM5W1F202000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-6S-C-12	DEM-5W1S-NMC-77	QRN 94008	ITT CANNON
311P10-6S-C-12	SCBM5W1F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-6S-C-15	DEM-5W1S-NMC-76	QRN 94008	ITT CANNON
311P10-6S-C-15	SCBM5W1F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-7P-B-12	DAM-3W3P-NMB-77	QRN 94008	ITT CANNON
311P10-7P-B-12	SCBM3W3M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-7P-B-15	DAM-3W3P-NMB-76	QRN 94008	ITT CANNON
311P10-7P-B-15	SCBM3W3M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-7P-C-12	DAM-3W3P-NMC-77	QRN 94008	ITT CANNON
311P10-7P-C-12	SCBM3W3M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-7P-C-15	DAM-3W3P-NMC-76	QRN 94008	ITT CANNON
311P10-7P-C-15	SCBM3W3M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-7S-B-12	DAM-3W3S-NMB-77	QRN 94008	ITT CANNON

GSFC S-311-P-10, Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P10-7S-B-12	SCBM3WF0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-7S-B-15	DAM-3W3S-NMB-76	QRN 94008	ITT CANNON
311P10-7S-B-15	SCBM3WF00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-7S-C-12	DAM-3W3S-NMC-77	QRN 94008	ITT CANNON
311P10-7S-C-12	SCBM3W3F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-7S-C-15	DAM-3W3S-NMC-76	QRN 94008	ITT CANNON
311P10-7S-C-15	SCBM3W3F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-8P-B-12	DAM-7W2P-NMB-77	QRN 94008	ITT CANNON
311P10-8P-B-12	SCBM7W2M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-8P-B-15	DAM-7W2P-NMB-76	QRN 94008	ITT CANNON
311P10-8P-B-15	SCBM7W2M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-8P-C-12	DAM-7W2P-NMC-77	QRN 94008	ITT CANNON
311P10-8P-C-12	SCBM7W2M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-8P-C-15	DAM-7W2P-NMC-76	QRN 94008	ITT CANNON
311P10-8S-B-12	DAM-7W2S-NMB-77	QRN 94008	ITT CANNON
311P10-8S-B-12	SCBM7W2F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-8S-B-15	DAM-7W2S-NMB-76	QRN 94008	ITT CANNON
311P10-8S-B-15	SCBM7W2F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-8S-C-12	DAM-7W2S-NMC-77	QRN 94008	ITT CANNON
311P10-8S-C-12	SCBM7W2M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-8S-C-15	DAM-7W2S-NMC-76	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-77	QRN 94008	ITT CANNON
311P10-9P-B-12	SCBM11W1M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-9P-B-15	DAM-11W1P-NMB-76	QRN 94008	ITT CANNON
311P10-9P-B-15	SCBM11W1M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-9P-C-12	DAM-11W1P-NMC-77	QRN 94008	ITT CANNON
311P10-9P-C-12	SCBM7W2F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-9P-C-15	DAM-11W1P-NMC-76	QRN 94008	ITT CANNON
311P10-9P-C-15	SCBM11W1M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-9S-B-12	DAM-11W1S-NMB-77	QRN 94008	ITT CANNON
311P10-9S-B-12	SCBM1121F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-9S-B-15	DAM-11W1S-NMB-76	QRN 94008	ITT CANNON
311P10-9S-B-15	SCBM11WF20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-9S-C-12	DAM-11W1S-NMC-77	QRN 94008	ITT CANNON

GSFC S-311-P-10, Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P10-9S-C-15	DAM-11W1S-NMC-76	QRN 94008	ITT CANNON
311P10-10P-B-12	DBM-5W5P-NMB-77	QRN 94008	ITT CANNON
311P10-10P-B-12	SCBM5W5M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-10P-B-15	DBM-5W5P-NMB-76	QRN 94008	ITT CANNON
311P10-10P-B-15	SCBM5W5M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-10P-C-12	DBM-5W5P-NMC-77	QRN 94008	ITT CANNON
311P10-10P-C-12	SCBM5W5M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-10P-C-15	DBM-5W5P-NMC-76	QRN 94008	ITT CANNON
311P10-10P-C-15	SCBM5W5M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-10S-B-12	DBM-5W5S-NMB-77	QRN 94008	ITT CANNON
311P10-10S-B-12	SCBM5WF0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-10S-B-15	DBM-5W5S-NMB-76	QRN 94008	ITT CANNON
311P10-10S-B-15	SCBM5W5F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-10S-C-12	DBM-5W5S-NMC-77	QRN 94008	ITT CANNON
311P10-10S-C-12	SCBM5W5F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-10S-C-15	DBM-5W5S-NMC-76	QRN 94008	ITT CANNON
311P10-10S-C-15	SCBM5W5F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-11P-B-12	DBM-9W4P-NMB-77	QRN 94008	ITT CANNON
311P10-11P-B-12	SCBM9W4M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-11P-B-15	DBM-9W4P-NMB-76	QRN 94008	ITT CANNON
311P10-11P-B-15	SCBM9W4M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-11P-C-12	DBM-9W4P-NMC-77	QRN 94008	ITT CANNON
311P10-11P-C-15	DBM-9W4P-NMC-76	QRN 94008	ITT CANNON
311P10-11S-B-12	DBM-9W4S-NMB-77	QRN 94008	ITT CANNON
311P10-11S-B-12	SCBM9W4F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-11S-B-15	DBM-9W4S-NMB-76	QRN 94008	ITT CANNON
311P10-11S-B-15	SCBM9W4F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-11S-C-12	DBM-9W4S-NMC-77	QRN 94008	ITT CANNON
311P10-11S-C-15	DBM-9W4S-NMC-76	QRN 94008	ITT CANNON
311P10-12P-B-12	DBM-13W3P-NMB-77	QRN 94008	ITT CANNON
311P10-12P-B-12	SCBM13W3M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-12P-B-15	DBM-13W3P-NMB-76	QRN 94008	ITT CANNON
311P10-12P-B-15	SCBM13W3M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-12P-C-12	DBM-13W3P-NMC-77	QRN 94008	ITT CANNON
311P10-12P-C-12	SCBM9W4M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-12P-C-15	DBM-13W3P-NMC-76	QRN 94008	ITT CANNON
311P10-12P-C-15	SCBM9W4M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES

GSFC S-311-P-10, Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P10-12S-B-12	DBM-13W3S-NMB-77	QRN 94008	ITT CANNON
311P10-12S-B-12	SCBM13W3F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-12S-B-15	DBM-13W3S-NMB-76	QRN 94008	ITT CANNON
311P10-12S-B-15	SCBM13W3F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-12S-C-12	DBM-13W3S-NMC-77	QRN 94008	ITT CANNON
311P10-12S-C-12	SCBM13W3F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-12S-C-15	DBM-13W3S-NMC-76	QRN 94008	ITT CANNON
311P10-12S-C-15	SCBM13W3F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-13P-B-12	DBM-17W2P-NMB-77	QRN 94008	ITT CANNON
311P10-13P-B-12	SCBM17W2M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-13P-B-15	DBM-17W2P-NMB-76	QRN 94008	ITT CANNON
311P10-13P-B-15	SCBM17W2M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-13P-C-12	DBM-17W3P-NMC-77	QRN 94008	ITT CANNON
311P10-13P-C-12	SCBM17W2M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-13P-C-15	DBM-17W2P-NMC-76	QRN 94008	ITT CANNON
311P10-13P-C-15	SCBM17W2M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-13S-B-12	DBM-17W2S-NMB-77	QRN 94008	ITT CANNON
311P10-13S-B-12	SCBM17W2F000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-13S-B-15	DBM-17W2S-NMB-76	QRN 94008	ITT CANNON
311P10-13S-B-15	SCBM17W2F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-13S-C-12	DBM-13W3S-NMC-77	QRN 94008	ITT CANNON
311P10-13S-C-12	SCBM17W2F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-13S-C-15	DBM-17W2S-NMC-76	QRN 94008	ITT CANNON
311P10-13S-C-15	SCBM17W2F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-14P-B-12	DBM-21W1P-NMB-77	QRN 94008	ITT CANNON
311P10-14P-B-12	SCBM21W1M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-14P-B-15	DBM-21W1P-NMB-76	QRN 94008	ITT CANNON
311P10-14P-B-15	SCBM21W1M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-14P-C-12	DBM-21W1P-NMC-77	QRN 94008	ITT CANNON
311P10-14P-C-12	SCBM21W1M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-14P-C-15	DBM-21W1P-NMC-76	QRN 94008	ITT CANNON
311P10-14P-C-15	SCBM21W1M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-14S-B-12	DBM-21W1S-NMB-77	QRN 94008	ITT CANNON
311P10-14S-B-12	SCBM21W1F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-14S-B-15	DBM-21W1S-NMB-76	QRN 94008	ITT CANNON
311P10-14S-B-15	SCBM21W1F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-14S-C-12	DBM-21W1S-NMC-77	QRN 94008	ITT CANNON

GSFC S-311-P-10, Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P10-14S-C-12	SCBM21W1F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-14S-C-15	DBM-21W1S-NMC-76	QRN 94008	ITT CANNON
311P10-14S-C-15	SCBM21W1F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-15P-B-12	DCM-8W8P-NMB-77	QRN 94008	ITT CANNON
311P10-15P-B-12	SCBM8W8M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-15P-B-15	DCM-8W8P-NMB-76	QRN 94008	ITT CANNON
311P10-15P-B-15	SCBM8W8M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-15P-C-12	DCM-8W8P-NMC-77	QRN 94008	ITT CANNON
311P10-15P-C-12	SCBM8WM0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-15P-C-15	DCM-8W8P-NMC-76	QRN 94008	ITT CANNON
311P10-15P-C-15	SCBM8W8M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-15S-B-12	DCM-8W8S-NMB-77	QRN 94008	ITT CANNON
311P10-15S-B-12	SCBM8W8F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-15S-B-15	DCM-8W8S-NMB-76	QRN 94008	ITT CANNON
311P10-15S-B-15	SCBM8W8F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-15S-C-12	DCM-8W8S-NMC-77	QRN 94008	ITT CANNON
311P10-15S-C-12	SCBM1W1F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-15S-C-15	DCM-8W8S-NMC-76	QRN 94008	ITT CANNON
311P10-15S-C-15	SCBM8W8F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-16P-B-12	DCM-13W6P-NMB-77	QRN 94008	ITT CANNON
311P10-16P-B-12	SCBM13W6M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-16P-B-15	DCM-13W6P-NMB-76	QRN 94008	ITT CANNON
311P10-16P-B-15	SCBM13W6M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-16P-C-12	DCM-13W6P-NMC-77	QRN 94008	ITT CANNON
311P10-16P-C-12	SCBM13W6M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-16P-C-15	DCM-13W6P-NMC-76	QRN 94008	ITT CANNON
311P10-16P-C-15	SCBM13W6M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-16S-B-12	DCM-13W6S-NMB-77	QRN 94008	ITT CANNON
311P10-16S-B-12	SCBM13W6F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-16S-B-15	DCM-13W6S-NMB-76	QRN 94008	ITT CANNON
311P10-16S-B-15	SCBM13W6F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-16S-C-12	DCM-13W6S-NMC-77	QRN 94008	ITT CANNON
311P10-16S-C-12	SCBM13W6F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-16S-C-15	DCM-13W6S-NMC-76	QRN 94008	ITT CANNON
311P10-16S-C-15	SCBM13W6F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-17P-B-12	DCM-17W5P-NMB-77	QRN 94008	ITT CANNON
311P10-17P-B-12	SCBM17W5M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES

GSFC S-311-P-10, Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P10-17P-B-15	DCM-17W5P-NMB-76	QRN 94008	ITT CANNON
311P10-17P-B-15	SCBM17W5M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-17P-C-12	DCM-17W5P-NMC-77	QRN 94008	ITT CANNON
311P10-17P-C-12	SCBM17W5M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-17P-C-15	DCM-17W5P-NMC-76	QRN 94008	ITT CANNON
311P10-17P-C-15	SCBM17W5M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-17S-B-12	DCM-17W5S-NMB-77	QRN 94008	ITT CANNON
311P10-17S-B-12	SCBM17W5F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-17S-B-15	DCM-17W5S-NMB-76	QRN 94008	ITT CANNON
311P10-17S-B-15	SCBM17W5F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-17S-C-12	DCM-17W5S-NMC-77	QRN 94008	ITT CANNON
311P10-17S-C-12	SCBM17W5F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-17S-C-15	DCM-17W5S-NMC-76	QRN 94008	ITT CANNON
311P10-17S-C-15	SCBM17W5F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-18P-B-12	DCM-21WA4P-NMB-77	QRN 94008	ITT CANNON
311P10-18P-B-12	SCBM21WA4M200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-18P-B-15	DCM-21WA4P-NMB-76	QRN 94008	ITT CANNON
311P10-18P-B-15	SCBM21WA4M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-18P-C-12	DCM-21WA4P-NMC-77	QRN 94008	ITT CANNON
311P10-18P-C-12	SCBM21WA4M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-18P-C-15	DCM-21WA4P-NMC-76	QRN 94008	ITT CANNON
311P10-18P-C-15	SCBM21WA4M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-18S-B-12	DCM-21WA4S-NMB-77	QRN 94008	ITT CANNON
311P10-18S-B-12	SCBM21WA4F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-18S-B-15	DCM-21WA4S-NMB-76	QRN 94008	ITT CANNON
311P10-18S-B-15	SCBM21WA4F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-18S-C-12	DCM-21WA4S-NMC-77	QRN 94008	ITT CANNON
311P10-18S-C-12	SCBM21WA4F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-18S-C-15	DCM-21WA4S-NMC-76	QRN 94008	ITT CANNON
311P10-18S-C-15	SCBM21WA4F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-20P-B-12	DCM-25W3P-NMB-77	QRN 94008	ITT CANNON
311P10-20P-B-12	SCBM25W3M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-20P-B-15	DCM-25W3P-NMB-76	QRN 94008	ITT CANNON
311P10-20P-B-15	SCBM25W3M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-20P-C-12	DCM-25W3P-NMC-77	QRN 94008	ITT CANNON
311P10-20P-C-12	SCBM-25W3M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-20P-C-15	DCM-25W3P-NMC-76	QRN 94008	ITT CANNON

GSFC S-311-P-10, Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P10-20P-C-15	SCBM25W3M2020G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-20S-B-12	DCM-25W3S-NMB-77	QRN 94008	ITT CANNON
311P10-20S-B-12	SCBM25W3F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-20S-B-15	DCM-25W3S-NMB-76	QRN 94008	ITT CANNON
311P10-20S-B-15	SCBM25W3F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-20S-C-12	DCM-25W3S-NMC-77	QRN 94008	ITT CANNON
311P10-20S-C-12	SCBM25W3F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-20S-C-15	DCM-25W3S-NMC-76	QRN 94008	ITT CANNON
311P10-20S-C-15	SCBM25W3F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-21P-B-12	DCM-27W2P-NMB-77	QRN 94008	ITT CANNON
311P10-21P-B-12	SCBM27W2M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-21P-B-15	DCM-27W2P-NMB-76	QRN 94008	ITT CANNON
311P10-21P-B-15	SCBM27W2M10200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-21P-C-12	DCM-27W2P-NMC-77	QRN 94008	ITT CANNON
311P10-21P-C-12	SCBM27W2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-21P-C-15	DCM-27W2P-NMC-76	QRN 94008	ITT CANNON
311P10-21P-C-15	SCBM27W2M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-21S-B-12	DCM-27W2S-NMB-77	QRN 94008	ITT CANNON
311P10-21S-B-12	SCBM27W2F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-21S-B-15	DCM-27W2S-NMB-76	QRN 94008	ITT CANNON
311P10-21S-B-15	SCBM27W2F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-21S-C-12	DCM-25W3S-NMC-77	QRN 94008	ITT CANNON
311P10-21S-C-12	SCBM27WF2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-21S-C-15	DCM-27W2S-NMC-76	QRN 94008	ITT CANNON
311P10-21S-C-15	SCBM27W2M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-22P-B-12	DDM-24W7P-NMB-77	QRN 94008	ITT CANNON
311P10-22P-B-12	SCBM24W7M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-22P-B-15	DDM-24W7P-NMB-76	QRN 94008	ITT CANNON
311P10-22P-B-15	SCBM24W7M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-22P-C-12	DDM-24W6S-NMC-77	QRN 94008	ITT CANNON
311P10-22P-C-12	SCBM24W7M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-22P-C-15	DDM-24W6S-NMC-76	QRN 94008	ITT CANNON
311P10-22P-C-15	SCBM24W7M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-22S-B-12	DDM-24W7S-NMB-77	QRN 94008	ITT CANNON
311P10-22S-B-12	SCBM24W7F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-22S-B-15	DDM-24W7S-NMB-76	QRN 94008	ITT CANNON
311P10-22S-B-15	SCBM24W7F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES

GSFC S-311-P-10, Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P10-22S-C-12	DDM-24W7S-NMC-76	QRN 94008	ITT CANNON
311P10-22S-C-12	SCBM24W7F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-22S-C-15	DDM-24W7P-NMC-76	QRN 94008	ITT CANNON
311P10-22S-C-15	SCBM24W7F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-23P-B-12	DDM-36W4P-NMB-77	QRN 94008	ITT CANNON
311P10-23P-B-12	SCBM36W4M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-23P-B-15	DDM-36W4P-NMB-76	QRN 94008	ITT CANNON
311P10-23P-B-15	SCBM36W4M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-23P-C-12	DDM-36W4S-NMC-77	QRN 94008	ITT CANNON
311P10-23P-C-12	SCBM36W4M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-23P-C-15	DDM-36W4S-NMC-76	QRN 94008	ITT CANNON
311P10-23P-C-15	SCBM36W4M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-23S-B-12	DDM-36W4S-NMB-77	QRN 94008	ITT CANNON
311P10-23S-B-12	SCBM36W4F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-23S-B-15	DDM-36W4S-NMB-76	QRN 94008	ITT CANNON
311P10-23S-B-15	SCBM36W4F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-23S-C-12	DDM-36W4S-NMC-77	QRN 94008	ITT CANNON
311P10-23S-C-12	SCBM36W4F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-23S-C-15	DDM-36W4S-NMC-76	QRN 94008	ITT CANNON
311P10-23S-C-15	SCBM36W4F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-24P-B-12	DDM-43W2P-NMB-77	QRN 94008	ITT CANNON
311P10-24P-B-12	SCBM43W2M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-24P-B-15	DDM-43W2P-NMB-76	QRN 94008	ITT CANNON
311P10-24P-B-15	SCBM43W2M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-24P-C-12	DDM-43W2S-NMC-77	QRN 94008	ITT CANNON
311P10-24P-C-12	SCBM43W2F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-24P-C-15	DDM-43W2S-NMC-76	QRN 94008	ITT CANNON
311P10-24P-C-15	SCBM43W2M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-24S-B-12	DDM-43W2S-NMB-77	QRN 94008	ITT CANNON
311P10-24S-B-12	SCBM43W2F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-24S-B-15	DDM-43W2S-NMB-76	QRN 94008	ITT CANNON
311P10-24S-B-15	SCBM47W1M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-24S-C-12	DDM-43W2S-NMC-77	QRN 94008	ITT CANNON
311P10-24S-C-12	SCBM43W2F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-24S-C-15	DDM-43W2S-NMC-76	QRN 94008	ITT CANNON
311P10-24S-C-15	SCBM43W2F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-25P-B-12	DDM-47W1P-NMB-77	QRN 94008	ITT CANNON

GSFC S-311-P-10, Connector, Electrical, Rectangular, Miniature, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P10-25P-B-12	SCBM471M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-25P-B-15	DDM-47W1P-NMB-76	QRN 94008	ITT CANNON
311P10-25P-B-15	SCBM47W1F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-25P-C-12	DDM-47W1P-NMC-77	QRN 94008	ITT CANNON
311P10-25P-C-12	SCBM47W1M2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-25P-C-15	DDM-47W1P-NMC-76	QRN 94008	ITT CANNON
311P10-25P-C-15	SCBM47W1M20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-25S-B-12	DDM-47W1S-NMB-77	QRN 94008	ITT CANNON
311P10-25S-B-12	SCBM47W1F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-25S-B-15	DDM-47W1S-NMC-76	QRN 94008	ITT CANNON
311P10-25S-B-15	SCBM47W1F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-25S-C-12	DDM-47W1S-NMC-77	QRN 94008	ITT CANNON
311P10-25S-C-12	SCBM47W1F2000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-25S-C-15	DDM-47W1S-NMC-76	QRN 94008	ITT CANNON
311P10-25S-C-15	SCBM47W1F20200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P10-29-B-12	DAM-15P-NMB-77	QRN 94008	ITT CANNON

GSFC S-311-P-4/05, Connector, Electrical, Rectangular, Subminiature, Polarized Shell, Detailed Specification For Space Flight Use			
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	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	TYCO ELECTRONICS/AMP, INC.
311P405-7P-B-15	SCBM3W3M00200G-1082-24	QRN 94007	POSITRONIC INDUSTRIES
311P405-7P-B-15	448153-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-7S-B-12	SCBM3W3F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-7S-B-12	445705-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-7S-B-15	SCBM3W3F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-7S-B-15	445705-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-8P-B-12	SCBC7W2M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-8P-B-12	448154-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-8P-B-15	DAMA-7W2P-NMB-88	QRN 94008	ITT CANNON
311P405-8P-B-15	SCBC7W2M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-8P-B-15	448154-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-8S-B-12	SCBC7W2F000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES

GSFC S-311-P-4/05, Connector, Electrical, Rectangular, Subminiature, Polarized Shell, Detailed Specification For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P405-8S-B-15	DAMA-7W2S-NMB-77	QRN 94008	ITT CANNON
311P405-8S-B-15	SCBC7W2F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-9P-B-12	DAA11W1PNMBK52	QRN 94008	ITT CANNON
311P405-9P-B-12	SCBC11W1M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-9P-B-12	211111-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-9P-B-15	DAAK11W1PNMBK52	Q24308-040609	ITT CANNON
311P405-9P-B-15	SCBC11W1M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-9P-B-15	211111-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-9S-B-12	DAA11W1SNMBK52	QRN 94008	ITT CANNON
311P405-9S-B-12	SCBC11W1F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-9S-B-12	211112-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-9S-B-15	DAAK11W1SNMBK52	Q24308-040609	ITT CANNON
311P405-9S-B-15	SCBC11W1F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-9S-B-15	211112-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-10P-B-12	DAM5W5PNMBK47	Q24308-040609	ITT CANNON
311P405-10P-B-12	SCBM5W5M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-10P-B-12	212491-6	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-10P-B-15	DAMK5W5PNMBK47	Q24308-040609	ITT CANNON
311P405-10P-B-15	SCBM5W5M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-10P-B-15	212491-7	QRN 94005	TYCO ELECTRONICS/AMP, INC.
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	QRN 94007	POSITRONIC INDUSTRIES
311P405-10S-B-12	212059-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-10S-B-15	DAMK5W5SNMBK47	Q24308-040609	ITT CANNON
311P405-10S-B-15	SCBM5W5F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-10S-B-15	SCBM5W5F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-10S-B-15	212059-06	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-11P-B-12	DAM9W4PNMBK52	Q24308-040609	ITT CANNON
311P405-11P-B-12	SCBC9W4M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-11P-B-12	212498-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-11P-B-15	DAMK9W4PNMBK52	Q24308-040609	ITT CANNON
311P405-11P-B-15	SCBC9W4M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-11P-B-15	212498-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-11S-B-12	SCBC9W4F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-11S-B-12	212502-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-11S-B-15	SCBC9W400200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES

GSFC S-311-P-4/05, Connector, Electrical, Rectangular, Subminiature, Polarized Shell, Detailed Specification For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P405-11S-B-15	212502-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-12P-B-12	DBA13W3PNMBK52	QRN 94008	ITT CANNON
311P405-12P-B-12	SCBC13W3M0000G-1082-24	QRN 94007	POSITRONIC INDUSTRIES
311P405-12P-B-12	208810-3	QRN 94005	TYCO ELECTRONICS/AMP, INC
311P405-12P-B-15	DBAK13W3PNMBK52	Q24308-040609	ITT CANNON
311P405-12P-B-15	SCBC13W3M00200G-1082-24	QRN 94007	POSITRONIC INDUSTRIES
311P405-12P-B-15	208810-4	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-12S-B-12	DBA13W3SNMBK52	QRN 94008	ITT CANNON
311P405-12S-B-12	SCBC13W3F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-12S-B-12	208811-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-12S-B-15	DBAK13W3SNMBK52	Q24308-040609	ITT CANNON
311P405-12S-B-15	SCBC13W3F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-12S-B-15	208811-4	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-13P-B-12	DBMA-17W2P-NMB-77	QRN 94008	ITT CANNON
311P405-13P-B-12	SCBC17W2M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-13P-B-12	212506-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-13P-B-15	SCBC17W2M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-13P-B-15	212506-4	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-13S-B-12	DBMA-17W2S-NMB-77	QRN 94008	ITT CANNON
311P405-13S-B-12	SCBC17W2F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-13S-B-12	212510-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-13S-B-15	SCBC17W2F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-13S-B-15	212510-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-14P-B-12	DCA21W1PNMBK52	Q24308-040609	ITT CANNON
311P405-14P-B-12	SCBC21W1M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-14P-B-12	212522-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-14P-B-15	DCAK21W1PNMBK52	Q24308-040609	ITT CANNON
311P405-14P-B-15	SCBC21W1M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-14P-B-15	212522-4	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-14S-B-12	SCBC21W1F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-14S-B-12	212526-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-14S-B-15	SCBC21W1F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-14S-B-15	212526-4	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-15P-B-12	DCM8W8PNMBK52	Q24308-040609	ITT CANNON
311P405-15P-B-12	SCBM8W8M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-15P-B-12	446405-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-15P-B-15	DCMK8W8PNMBK52	Q24308-040609	ITT CANNON

GSFC S-311-P-4/05, Connector, Electrical, Rectangular, Subminiature, Polarized Shell, Detailed Specification For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P405-15P-B-15	SCBM8W8M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-15P-B-15	446405-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-15S-B-12	DCM8W8SNMBK52	Q24308-040609	ITT CANNON
311P405-15S-B-12	SCBM8W8F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-15S-B-12	445730-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-15S-B-15	DCMK8W8SNMBK52	Q24308-040609	ITT CANNON
311P405-15S-B-15	SCBM8W8F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-15S-B-15	445730-4	QRN 94005	TYCO ELECTRONICS/AMP, INC.
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	TYCO ELECTRONICS/AMP, INC.
311P405-17P-B-15	SCBC17W5M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-17P-B-15	212514-4	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-17S-B-12	SCBC17W5F0000G-1082-24	QRN 94007	POSITRONIC INDUSTRIES
311P405-17S-B-12	212518-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-17S-B-15	SCBC17W5F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-17S-B-15-	212518-4	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-18P-B-12	DCA21W1PNMBK52	Q24308-040609	ITT CANNON
311P405-18P-B-12	SCBC21WA4M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-18P-B-12	212530-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-18P-B-15	DCAK21WA1PNMBK52	Q24308-040609	ITT CANNON
311P405-18P-B-15	SCBC21WAFM00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-18P-B-15	212530-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-18S-B-12	DCA21WA1SNMBK52	Q24308-040609	ITT CANNON
311P405-18S-B-12	SCBC21WA4F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-18S-B-12	212534-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-18S-B-15	DCAK21WA1SNMBK52	Q24308-040609	ITT CANNON
311P405-18S-B-15	SCBC21WA4F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-18S-B-15	212534-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-20P-B-12	SCBC25W3M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-20P-B-12	208742-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-20P-B-15	SCBC25W3M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-20P-B-15	208742-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-20S-B-12	SCBC25W3F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES

GSFC S-311-P-4/05, Connector, Electrical, Rectangular, Subminiature, Polarized Shell, Detailed Specification For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P405-20S-B-12	208551-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-20S-B-15	SCBC25W3F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-20S-B-15	208551-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-21P-B-12	SCBC27W2M000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-21P-B-12	212538-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-21P-B-15	SCBC27W2M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-21P-B-15	212538-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-21S-B-12	SCBC27W2F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-21S-B-12	212542-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-21S-B-15	SCBC27W2F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-21S-B-15	212542-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-22P-B-12	SCBC24W7M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-22P-B-12	208743-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-22P-B-15	SCBC25W7M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-22P-B-15	208743-6	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-22S-B-12	SCBC244W7F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-22S-B-12	208552-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-22S-B-15	SCBC24W7F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-22S-B-15	208552-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-23P-B-12	SCBC36W4M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-23P-B-12	207644-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-23P-B-15	SCBC36W4M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-23P-B-15	207644-4	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-23S-B-12	SCBC36W4M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-23S-B-12	208550-2	QRN 94005	TYCO ELECTRONICS/AMP, INC.
311P405-23S-B-15	SCBC36W4F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-23S-B-15	208550-3	QRN 94005	TYCO ELECTRONICS/AMP, INC.
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	DDA43W2SNMBK52	Q24308-040609	ITT CANNON
311P405-24S-B-12	SCBC47W1F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P405-24S-B-15	DDAK43W2SNMBK52	Q24308-040609	ITT CANNON
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	QRN 94007	POSITRONIC INDUSTRIES
311P405-25S-B-15	SCBC47W1F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES

GSFC S-311-P-4/06, Connector, Electrical, Coaxial, and High Voltage For Electrical Connectors			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
GCP1	DM53740-17	QRN 94008	ITT CANNON
GCP1	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCP2	DM53740-15	QRN 94008	ITT CANNON
GCP2	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCP3	DM53740-16	QRN 94008	ITT CANNON
GCP3	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCP4	DM53740-18	QRN 94008	ITT CANNON
GCP4	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCRO2	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCRP1	DM53741-12	QRN 94008	ITT CANNON
GCRP1	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCRP2	DM53741-11	QRN 94008	ITT CANNON
GCRP3	DM53741-10	QRN 94008	ITT CANNON
GCRP3	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCRP4	DM53741-13	QRN 94008	ITT CANNON
GCRP4	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCS1	DM53742-18	QRN 94008	ITT CANNON
GCS1	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCS2	DM53742-16	QRN 94008	ITT CANNON
GCS2	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCS3	DM53742-17	QRN 94008	ITT CANNON
GCS3	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCS4	DM53742-19	QRN 94008	ITT CANNON
GCS4	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCSR1	DM43743-18	QRN 94008	ITT CANNON
GCSR1	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCSR2	DM43743-16	QRN 94008	ITT CANNON
GCSR2	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCSR3	DM43743-17	QRN 94008	ITT CANNON
GCSR3	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GCSR4	DM43743-19	QRN 94008	ITT CANNON
GCSR4	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GHP6	DM51157-8	QRN 94008	ITT CANNON
GHP6	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC
GHRP6	DM51157-5005	QRN 94008	ITT CANNON
GHRP6	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GHRS6	DM51155-5004	QRN 94008	ITT CANNON

GSFC S-311-P-4/06, Connector, Electrical, Coaxial, and High Voltage For Electrical Connectors			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
GHRS6	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.
GHS6	DM51155-7	QRN 94008	ITT CANNON
GHS6	Not Assigned	QRN 93003	TYCO ELECTRONICS/AMP, INC.

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
311P407-1P-B-12	SDD15M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-1P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-1P-B-12	206498-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-1P-B-12	DEMA15PNMBK47FO	Q24308-040609	ITT CANNON
311P407-1P-B-15	SDD15M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-1P-B-15	206498-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-1P-B-15	DEMAK15PNMBK47FO	Q24308-040609	ITT CANNON
311P407-1S-B-12	SDD15F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-1S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-1S-B-12	206499-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-1S-B-12	DEMA15SNMBK47FO	Q24308-040609	ITT CANNON
311P407-1S-B-15	SDD15F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-1S-B-15	206499-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-1S-B-15	DEMAK15SNMBK47FO	Q24308-040609	ITT CANNON
311P407-2P-B-12	SDD26M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-2P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-2P-B-12	206500-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-2P-B-12	DAMA26PNMBK47FO	Q24308-040609	ITT CANNON
311P407-2P-B-15	SDD26M00200G-1082-24	QRN 94007	POSITRONIC INDUSTRIES
311P407-2P-B-15	206500-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-2P-B-15	DAMAK26PNMBK47FO	Q24308-040609	ITT CANNON
311P407-2S-B-12	SDD26F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-2S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-2S-B-12	206501-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-2S-B-12	DAMA26SNMBK47FO	Q24308-040609	ITT CANNON
311P407-2S-B-15	SDD26F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-2S-B-15	206501-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-2S-B-15	DAMAK26SNMBK47FO	Q24308-040609	ITT CANNON
311P407-3P-B-12	SDD44M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-3P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-3P-B-12	206063-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.

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
311P407-3P-B-12	DBMA44PNMBK47FO	Q24308-040609	ITT CANNON
311P407-3P-B-15	SDD44M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-3P-B-15	206063-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-3P-B-15	DBMAK44PNMBK47FO	Q24308-040609	ITT CANNON
311P407-3S-B-12	SDD44F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-3S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-3S-B-12	DBMA44SNMBK47FO	Q24308-040609	ITT CANNON
311P407-3S-B-12	206064-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-3S-B-15	SDD44F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-3S-B-15	206064-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-3S-B-15	DBMAK44SNMBK47FO	Q24308-040609	ITT CANNON
311P407-4P-B-12	SDD62M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-4P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-4P-B-12	206502-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-4P-B-12	DCMA62PNMBK47FO	Q24308-040609	ITT CANNON
311P407-4P-B-15	SDD62M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-4P-B-15	206502-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-4P-B-15	DCMAK62PNMBK47FO	Q24308-040609	ITT CANNON
311P407-4S-B-12	SDD62F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-4S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-4S-B-12	206503-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-4S-B-12	DCMA62SNMBK47FO	Q24308-040609	ITT CANNON
311P407-4S-B-15	SDD62F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-4S-B-15	206503-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-4S-B-15	DCMAK62SNMBK47FO	Q24308-040609	ITT CANNON
311P407-5P-B-12	SDD78M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-5P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-5P-B-12	206504-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-5P-B-12	DDMA78PNMBK47FO	Q24308-040609	ITT CANNON
311P407-5P-B-15	SDD78M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-5P-B-15	206504-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-5P-B-15	DDMAK78PNMBK47FO	Q24308-040609	ITT CANNON
311P407-5S-B-12	SDD78F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-5S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-5S-B-12	206505-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-5S-B-12	DDMA78SNMBK47FO	Q24308-040609	ITT CANNON
311P407-5S-B-15	SDD78F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES

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
311P407-5S-B-15	206505-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-5S-B-15	DDMAK78SNMBK47FO	Q24308-040609	ITT CANNON
311P407-6P-B-12	SND104M00G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-6P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-6P-B-12	206066-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-6P-B-15	SDD104M0020G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-6P-B-15	206066-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-6S-B-12	SDD104F000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-6S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P407-6S-B-12	206065-4	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P407-6S-B-15	SDD104F0020G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P407-6S-B-15	206065-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.

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	ITT CANNON
G08P1	MC8022D-50-1202.4	QRN 94007	POSITRONIC INDUSTRIES
G08P1	340100507B	QRN 93004	SOURIAU USA INC
G08P1	204370-8	CTL5064-058	TYCO ELECTRONICS/AMP, INC
G08S1	031-1147-002	QRN 94008	ITT CANNON
G08S1	FC8022D-50-1202.4	QRN 94007	POSITRONIC INDUSTRIES
G08S1	340100508B	QRN 93004	SOURIAU USA INC
G08S1	206071-1	CTL5064-058	TYCO ELECTRONICS/AMP, INC.
G08S2	FC8022M2-GSFC	00434621.AA	POSITRONIC INDUSTRIES

GSFC S-311-P-4/09, 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	ITT CANNON
311P409-1P-B-12	SND9M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-1P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P409-1P-B-12	207252-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-1P-B-15	DEMAK9PNMBK47FO	QRN 94008	ITT CANNON
311P409-1P-B-15	SND9M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-1P-B-15	207252-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-1S-B-12	DEMA9SNMBK47FO	QRN 94008	ITT CANNON
311P409-1S-B-12	SND9F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES

GSFC S-311-P-4/09, Connector, Electrical, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P409-1S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P409-1S-B-12	207253-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-1S-B-15	DEMAK9SNMBK47FO	QRN 94008	ITT CANNON
311P409-1S-B-15	SND9F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-1S-B-15	207253-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-29-B-12	SND15M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-2P-B-12	DAMA15PNMBK47FO	QRN 94008	ITT CANNON
311P409-2P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P409-2P-B-12	206798-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-2P-B-15	DAMAK15PNMBK47FO	QRN 94008	ITT CANNON
311P409-2P-B-15	SND15M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-2P-B-15	206798-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-2S-B-12	DAMA15SNMBK47FO	QRN 94008	ITT CANNON
311P409-2S-B-12	SND15F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-2S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P409-2S-B-12	206799-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-2S-B-15	DAMAK15SNMBK47FO	QRN 94008	ITT CANNON
311P409-2S-B-15	SND15F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-2S-B-15	206799-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-3P-B-12	DBMA25PNMBK47FO	QRN 94008	ITT CANNON
311P409-3P-B-12	SND25M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-3P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P409-3P-B-12	206800-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-3P-B-15	DBMAK25PNMBK47FO	QRN 94008	ITT CANNON
311P409-3P-B-15	SND25M00200G-1082.24	QRN94007	SOURIAU USA INC
311P409-3P-B-15	206800-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-3S-B-12	DBMA25SNMBK47FO	QRN 94008	ITT CANNON
311P409-3S-B-12	SND25F0000G-1082-24	QRN 94007	POSITRONIC INDUSTRIES
311P409-3S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P409-3S-B-12	206801-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-3S-B-15	DBMAK25SNMBK47FO	QRN 94008	ITT CANNON
311P409-3S-B-15	SND25F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-3S-B-15	206801-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-4P-B-12	DCMA37NMBK47FO	QRN 94008	ITT CANNON
311P409-4P-B-12	SND37M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-4P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P409-4P-B-12	206802-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-4P-B-15	DCMAK37PNMBK47FO	QRN 94008	ITT CANNON

GSFC S-311-P-4/09, Connector, Electrical, Polarized Shell, Rack and Panel, For Space Flight Use			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P409-4P-B-15	SND37M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-4P-B-15	206802-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-4S-B-12	DCMA37SNMBK47FO	QRN 94008	ITT CANNON
311P409-4S-B-12	SND37F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-4S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P409-4S-B-12	206803-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-4S-B-15	DCMAK37SNMBK47FO	QRN 94008	ITT CANNON
311P409-4S-B-15	SND37F00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-4S-B-15	206803-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-5P-B-12	DDMA50PNMBK47FO	QRN 94008	ITT CANNON
311P409-5P-B-12	SND50M0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-5P-B-12	TBD	QRN 93004	SOURIAU USA INC
311P409-5P-B-12	206804-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-5P-B-15	DDMAK50PNMBK47FO	QRN 94008	ITT CANNON
311P409-5P-B-15	SND50M00200G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-5P-B-15	206804-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-5S-B-12	DDMA50SNMBK47FO	QRN 94008	ITT CANNON
311P409-5S-B-12	SND50F0000G-1082.24	QRN 94007	POSITRONIC INDUSTRIES
311P409-5S-B-12	TBD	QRN 93004	SOURIAU USA INC
311P409-5S-B-12	206805-2	CTL5066-027	TYCO ELECTRONICS/AMP, INC.
311P409-5S-B-15	DDMAK50SNMBK47FO	QRN 94008	ITT CANNON
311P409-5S-B-15	SND50F00200G-1082-24	QRN 94007	POSITRONIC INDUSTRIES
311P409-5S-B-15	206805-1	CTL5066-027	TYCO ELECTRONICS/AMP, INC.

GSFC S-311-P-4/10, Contacts, Electrical, Crimp Style, Size 20			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
G10P1	330-5291-037	QRN 94008	ITT CANNON
G10P1	MC6020D-50-1202.4	QRN 94007	POSITRONIC INDUSTRIES
G10P1	340100501B	QRN 93004	SOURIAU USA INC
G10P1	205089-4	CTL5064-057	TYCO ELECTRONICS/AMP, INC.
G10S1	031-1007-052	QRN 94008	ITT CANNON
G10S1	FC6020D-50-1202.4	QRN 94007	POSITRONIC INDUSTRIES
G10S1	340100502B	QRN 93004	SOURIAU USA INC
G10S1	206793-1	CTL5064-057	TYCO ELECTRONICS/AMP, INC.
G10S2	FC6020M2-GSFC	00434621.AA	POSITRONIC INDUSTRIES

GSFC S-311-P-768, 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	AMPHENOL AEROSPACE
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 S-311-P-822, Connectors, PWB,2 mm cPCITM Style, High Reliability			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P822 MC-110-AG-D4	Not available	204287	HYPERTRONICS
311P822 MC-110-AS-D4	822 MC-110-AS-D4-S12-14-8G	204287	HYPERTRONICS
311P822 MC-110-BG-D4	Not available	204287	HYPERTRONICS
311P822 MC-110-BS-D4	822 MC-110-BS-D4-S12-14-8G	204287	HYPERTRONICS
311P822-BPF	T-2066	204287	HYPERTRONICS
311P822-DCF	T-2082	204287	HYPERTRONICS
311P822-FA-095-B	822-FA-095-B	204287	HYPERTRONICS
311P822-FA-110-A	822-FA-110-A	204287	HYPERTRONICS
311P822-FA-110-B	822-FA-110-B	204287	HYPERTRONICS
311P822-FC-095-BG-D	822-FC-095-BG-D-S2-14-8G	204287	HYPERTRONICS
311P822-FC-095-BG-D2	822-FC-095-BG-D2-S2-14-8G	204287	HYPERTRONICS
311P822-FC-095-BG-D4	822-FC-095-BG-D4-S2-14-8G	204287	HYPERTRONICS
311P822-FC-095-BS-D	822-FC-095-BS-D-S12-14-8G	204287	HYPERTRONICS
311P822-FC-095-BS-D2	822-FC-095-BS-D2-S12-14-8G	204287	HYPERTRONICS
311P822-FC-095-BS-D4	822-FC-095-BS-D4-S12-14-8G	204287	HYPERTRONICS
311P822-FC-110-AG-D	822-FC-110-AG-D-S2-14-8G	204287	HYPERTRONICS
311P822-FC-110-AG-D2	822-FC-110-AG-D2-S2-14-8G	204287	HYPERTRONICS
311P822-FC-110-AG-D4	822-FC-110-AG-D4-S2-14-8G	204287	HYPERTRONICS
311P822-FC-110-AS-D	822-FC-110-AS-D-S12-14-8G	204287	HYPERTRONICS
311P822-FC-110-AS-D2	822-FC-110-AS-D2-S12-14-8G	204287	HYPERTRONICS
311P822-FC-110-AS-D4	822-FC-110-AS-D4-S12-14-8G	204287	HYPERTRONICS
311P822-FC-110-BG-D	822-FC-110-BG-D-S2-14-8G	204287	HYPERTRONICS
311P822-FC-110-BG-D2	822-FC-110-BG-D2-S2-14-8G	204287	HYPERTRONICS
311P822-FC-110-BG-D4	822-FC-110-BG-D4-S2-14-8G	204287	HYPERTRONICS
311P822-FC-110-BS-D	822-FC-110-BS-D-S12-14-8G	204287	HYPERTRONICS
311P822-FC-110-BS-D2	822-FC-110-BS-D2-S12-14-8G	204287	HYPERTRONICS
311P822-FC-110-BS-D4	822-FC-110-BS-D4-S12-14-8G	204287	HYPERTRONICS
311P822-FFA-095-B	822-FFA-095-B	204287	HYPERTRONICS

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

GSFC S-311-P-822, Connectors, PWB,2 mm cPCITM Style, High Reliability			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P822-MK-04	ZK2000-002-04	204287	HYPERTRONICS
311P822-MK-05	ZK2000-002-05	204287	HYPERTRONICS
311P822-MK-07	ZK2000-002-07	204287	HYPERTRONICS
311P822-MK-08	ZK2000-002-08	204287	HYPERTRONICS
311P822-MK-14	ZK2000-002-14	204287	HYPERTRONICS
311P822-MK-16	ZK2000-002-16	204287	HYPERTRONICS
311P822-MK-19	ZK2000-002-19	204287	HYPERTRONICS
311P822-MK-21	ZK2000-002-21	204287	HYPERTRONICS
311P822-MK-22	ZK2000-002-22	204287	HYPERTRONICS
311P822-MK-25	ZK2000-002-25	204287	HYPERTRONICS
311P822-MK-27	ZK2000-002-27	204287	HYPERTRONICS
311P822-MK-29	ZK2000-002-29	204287	HYPERTRONICS
311P822-MK-31	ZK2000-002-31	204287	HYPERTRONICS
311P822-MK-33	ZK2000-002-33	204287	HYPERTRONICS
311P822-MK-35	ZK2000-002-35	204287	HYPERTRONICS
311P822-MK-37	ZK2000-002-37	204287	HYPERTRONICS
311P822-MK-59	ZK2000-002-59	204287	HYPERTRONICS
311P822-MK-61	ZK2000-002-61	204287	HYPERTRONICS
311P822-MK-69	ZK2000-002-69	204287	HYPERTRONICS

5.3 RELAYS

GSFC S-311-P-754/01 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	TELEDYNE RELAYS
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 S-311-P-754/02, 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 S-311-P-754/03, 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	TYCO ELECTRONICS - CII
G311P754/03-002	J412-9WM	QPDSIS-39016	TELEDYNE RELAYS
G311P754/03-002	To be assigned	QPDSIS-39016	TYCO ELECTRONICS - CII
G311P754/03-003	J412-12WM	QPDSIS-39016	TELEDYNE RELAYS
G311P754/03-003	To be assigned	QPDSIS-39016	TYCO ELECTRONICS - CII
G311P754/03-004	J412-18WM	QPDSIS-39016	TELEDYNE RELAYS
G311P754/03-004	To be assigned	QPDSIS-39016	TYCO ELECTRONICS - CII
G311P754/03-005	J412-26WM	QPDSIS-39016	TELEDYNE RELAYS
G311P754/03-005	To be assigned	QPDSIS-39016	TYCO ELECTRONICS - CII

GSFC S-311-P-754/04, 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	TELEDYNE RELAYS
G311P754/04-001	MACD-8027	QPDSIS-39016	TYCO ELECTRONICS - CII

GSFC S-311-P-754/04, 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
G311P754/04-002	J412D-9M	QPDSIS-39016	TELEDYNE RELAYS
G311P754/04-002	To be assigned	QPDSIS-39016	TYCO ELECTRONICS – CII
G311P754/04-003	J412D-12M	QPDSIS-39016	TELEDYNE RELAYS
G311P754/04-003	To be assigned	QPDSIS-39016	TYCO ELECTRONICS - CII
G311P754/04-004	J412D-18M	QPDSIS-39016	TELEDYNE RELAYS
G311P754/04-004	To be assigned	QPDSIS-39016	TYCO ELECTRONICS – CII
G311P754/04-005	J412D-26M	QPDSIS-39016	TELEDYNE RELAYS
G311P754/04-005	To be assigned	QPDSIS-39016	TYCO ELECTRONICS – CII

GSFC S-311-P-754/06, 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	BABCOCK
G311P754/06-001	E2100403ATM	QPDSIS-83536	DEUTSCH RELAYS
G311P754/06-001	J-D2A-300M	QPDSIS-83536	LEACH INTERNATIONAL
G311P754/06-002	BR246-320A2-28V-024M	QPDSIS-83536	BABCOCK
G311P754/06-002	E2100403BGM	QPDSIS-83536	DEUTSCH RELAYS
G311P754/06-002	J-D4A-300M	QPDSIS-83536	LEACH INTERNATIONAL

GSFC S-311-P-754/07, 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	TYCO ELECTRONICS – CII
G311P754/07-002	To be assigned	QPDSIS-39016	TYCO ELECTRONICS – CII
G311P754/07-003	To be assigned	QPDSIS-39016	TYCO ELECTRONICS – CII
G311P754/07-056	3SBC2203A2		TYCO ELECTRONICS – CII

GSFC S-311-P-754/08, 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	TYCO ELECTRONICS - CII
G311P754/08-002	3SBM1264A2	QPDSIS-39016	TYCO ELECTRONICS – CII
G311P754/08-003	3SBM1246A2	QPDSIS-39016	TYCO ELECTRONICS – CII

GSFC S-311-P-754/09, 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	BABCOCK
G311P754/09-002	BR150-116C1-12V-007M	QPDSIS-39016	BABCOCK
G311P754/09-003	BR150-720C1-26V-002M	QPDSIS-39016	BABCOCK
G311P754/09-001	To be assigned	QPDSIS-39016	TYCO ELECTRONICS – CII
G311P754/09-002	To be assigned	QPDSIS-39016	TYCO ELECTRONICS – CII
G311P754/09-003	3SBH1347A2	QPDSIS-39016	TYCO ELECTRONICS – CII

GSFC S-311-P-754/10, 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	BABCOCK
G311P754/10-001	E4100402ATM	QPDSIS-83536	DEUTSCH RELAYS
G311P754/10-001	K-D2A-300M	QPDSIS-83536	LEACH INTERNATIONAL
G311P754/10-002	BR230-290A2-28V-022M	QPDSIS-83536	BABCOCK
G311P754/10-002	E4100402BGM	QPDSIS-83536	DEUTSCH RELAYS
G311P754/10-002	K-D4A-300M	QPDSIS-83536	LEACH INTERNATIONAL

GSFC S-311-P-754/11, 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	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	BABCOCK
G311P754/11-002	EL3250402BG	QPDSIS-6106	DEUTSCH RELAYS
G311P754/11-002	KCL-D4A-002	QPDSIS-6106	LEACH INTERNATIONAL

5.4 RESISTORS

GSFC S-311-P-672 Resistor, Fixed, High Voltage (Victoreen Mini-Mox)			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
G311P672-1-*****	MO* 400*****	QRN 92003	OHMITE
G311P672-2-*****	MO* 750*****	QRN 92003	OHMITE
G311P673-3-*****	MO* 1125*****	QRN 92003	OHMITE

GSFC S-311-P-683 Resistor, Fixed, Precision High Voltage (Caddock Type MG and HG)			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
G311P683-650*****	MG650-*****-***	QRN 92004	CADDOCK ELECTRONICS
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 S-311-P-741 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	CADDOCK ELECTRONICS
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

GSFC S-311-P-742 Resistor, Fixed, Low TC, Precision, Radial-Lead(Caddock Type TK)			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
G311P742-134*****B	TK134	QR 09-0304	CADDOCK ELECTRONICS
G311P742-134*****C	TK134	QR 09-0304	CADDOCK ELECTRONICS
G311P742-134*****F	TK134	QR 09-0304	CADDOCK ELECTRONICS

GSFC S-311-P-796, Resistor, "Matched-Pair", Low TC, Precision, Radial-Lead(Caddock Type TK)			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
G311P796-621-01	TK621	QR 09-0303	CADDOCK ELECTRONICS
G311P796-633-01	TK633	QR 09-0303	CADDOCK ELECTRONICS
G311P796-639-01	TK639	QR 09-0303	CADDOCK ELECTRONICS

GSFC S-311-P-813, Resistor, Fixed,Low TC, Percision, Radial-Lead			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
G311P813*********	WN Series	55182-484-03	WILBRECHT LEDCO, INC.
	100 ohms thru 100 kohms		
	±5, 10 or 20 ppm/°C		
	All Tolerances		
G311P813*********	WZ Series	55182-859-04	WILBRECHT LEDCO,INC.
	100 ohms thru 50 kohms	55182-860-04	
	±2.5, 5, 10 or 20 ppm/°C		
	All tolerances		

5.5 THERMISTORS

GSFC S-311-P-18, Thermistor, (Thermally Sensitive Resistor), Insulated and Uninsulated, Negative TC			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P18-01A***	MEAS44901A***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-01E***	MEAS44901E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-01N***	MEAS44901N***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-01S***	MEAS44901S***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-01T*** 1/	MEAS44901T*** 1/	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-02A***	MEAS44902A***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-02E***	MEAS44902E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-02N***	MEAS44902N***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-02S***	MEAS44902S***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-02T*** 1/	MEAS44902T*** 1/	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-03A***	MEAS44903A***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-03E***	MEAS44903E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-03N***	MEAS44903N***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-03S***	MEAS44903S***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-03T*** 1/	MEAS44903T*** 1/	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-04A***	MEAS44904A***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-04E***	MEAS44904E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-04N***	MEAS44904N***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-04S***	MEAS44904S***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-04T*** 1/	MEAS44904T*** 1/	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-05A***	MEAS44905A***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-05E***	MEAS44905E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-05N***	MEAS44905N***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-05S***	MEAS44905S***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-05T*** 1/	MEAS44905T*** 1/	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-06A***	MEAS44906A***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-06E***	MEAS44906E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-06N***	MEAS44906N***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-06S***	MEAS44906S***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-06T*** 1/	MEAS44906T*** 1/	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-07A***	MEAS44907A***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-07E***	MEAS44907E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-07N***	MEAS44907N***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-07S***	MEAS44907S***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-07T*** 1/	MEAS44907T*** 1/	MIL-PRF-23648	MEASUREMENT SPECIALTIES

GSFC S-311-P-18, Thermistor, (Thermally Sensitive Resistor), Insulated and Uninsulated, Negative TC			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
311P18-08A***	MEAS44908A***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-08E***	MEAS44908E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-08N***	MEAS44908N***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-08S***	MEAS44908S***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-08T*** 1/	MEAS44908T*** 1/	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-09A***	MEAS44909A***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-09E***	MEAS44909E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-09N***	MEAS44909N***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-09S***	MEAS44909S***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-09T*** 1/	MEAS44909T*** 1/	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-10A***	MEAS44910E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-10E***	MEAS44910E***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-10N***	MEAS44910N***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-10S***	MEAS44910S***	MIL-PRF-23648	MEASUREMENT SPECIALTIES
311P18-10T*** 1/	MEAS44910T*** 1/	MIL-PRF-23648	MEASUREMENT SPECIALTIES

Note:

1/ Parts with Lot Date Codes prior to Jul 15, 2011 are not preferred for flight use. Wire has been changed to SEA-AS22759/22.

GSFC S-311-P-827,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	QUALITY THERMISTOR, INC.
311P827-31S2001	QT0805-202F	TRD: 08/10/09	QUALITY THERMISTOR, INC.

5.6 THERMOFOIL HEATERS

GSFC S-311-P-079, Thermofoil Heater			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
HK2*****	Custom manufactured to the GSFC specification.	QRN 92005	MINCO PRODUCTS
TBA	Procure per Tayco specification TPS-5010, compliant to GSFC S-311-P-079	TR2008	TAYCO ENGINEERING, INC.

5.7 THERMOSTATS

GSFC S-311-641, Thermostats			
Procurement PIN	Manufacturer Similar PIN	Test Report	Manufacturer
G311P641/02**********	M2 Series	QPL-24236-35 1/	SENSATA TECHNOLOGIES INC
G311P641/03**********	700 Series	QPL-24236-35 1/	Honeywell DSES Redmond, WA
G311P641/05**********	M1/11041 Series	QPL-24236-35 1/	SENSATA TECHNOLOGIES INC
G311P641/06**********	4BT Series	QPL-24236-35 1/	SENSATA TECHNOLOGIES INC
G311P641/07**********	3BT Series	QPL-24236-35 1/	SENSATA TECHNOLOGIES INC

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: Amphenol Aerospace
Bendix Connectors Opns
Street Address: 40-60 Delaware Avenue
City, State, Zip Code: Sidney NY 13838-1395

Phone: (607)563-5011
Fax: (607)563-5157

Manufacturer: Babcock, Inc.
Street Address: 14930 Alondra Blvd.
City, State Zip Code: La Mirada, CA 90638-5752

Phone: (714)994-6500
Fax: (714)538-9740

Manufacturer: Caddock Electronics, Inc
Street Address: 1717 Chicago Avenue
City, State Zip Code: Riverside, CA 92507-2364

Phone: (541)496-0700
Fax: (541)496-0408

Manufacturer: Deutsch Relays, Inc
Street Address: 55 Engineers Road
City, State, Zip Code: Hauppauge, NY 11788

Phone: (631)840-3224
Fax: (631)232-4104

Manufacturer: Hypertronics
Street Address: 16 Brent Drive
City, State, Zip Code: Hudson, MA 01749 USA

Phone: 1 (978)568-0451, (800)225-9228
Fax: 1 (978)568-0680

Manufacturer: Honeywell International, Inc.
Street Address: 15001 N.E. 36th Street
P.O. Box 97001
City, State, Zip Code: Redmond, Washington 98073-9701

Phone: (425)885-8226
Fax: (206)883-2104

Manufacturer: ITT Cannon
Street Address: 666 E. Dyer Road1851 E Deere Avenue
City, State, Zip Code: Santa Ana, CA 92705-5612

Phone: (714)557-4700
Fax: (714)628-8362

Manufacturer: Leach International
Street Address: 6900 Orangethorpe Avenue
City, State, Zip Code: Buena Park, CA 90620-1351

Phone: (631)244-1490
Fax: (631)244-1487

Manufacturer: Minco Products, Inc.
Street Address: 7300 Commerce Lane
City, State, Zip Code: Minneapolis, MN 55432-3113

Phone: (763)571-3121
Fax: (763)571-0927

Manufacturer: Measurement Specialties (Formerly as YSI Temperature)
Street Address: 1000 Lucas Way
City, State, Zip Code: Hampton, VA 23666, USA

Phone: 1(757)766-1500, 1(800)745-8008
Fax: 1(757)766-4297

Manufacturer: Ohmite (Formerly as Victoreen, Inc)
Street Address: 85 W. Algonquin Road, Suite 230
City, State, Zip Code: Arlington Heights, IL 60005

Phone: 1(866)964-6483, 1(847)258-0300
Fax: 1(847)574-7522

Manufacturer: Positronic Industries, Inc
Street Address: 423 N. Campbell Avenue
PO Box 8247
City, State, Zip Code: Springfield, MO 65806-1007

Phone: (417)866-2322, (800)641-4054
Fax: (417)866-4115

Manufacturer: Presidio Components, Inc.
Street Address: 7169 Construction Court
City, State, Zip Code; San Diego, CA 92121 USA

Phone: 1(858)578-9390, 1(800)722-9923
Fax: 1(858)578-6225, 1(800)538-3880

Manufacturer: Quality Thermistor, Inc.
Street Address: 2108 Century Way
City, State, Zip Code: Boise, ID 83709

Phone: (208)377-3373
Fax: (208)376-4754

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
Fax: (508)236-1598

Manufacturer: Souriau USA Inc [Formerly Framatome Connectors, Inc.]
Street Address: 25 Grumbacher Road
City, State, Zip Code: York, PA, 17406-8417

Phone: (717)718-2662
Fax: (717)505-5953

Manufacturer: Tayco Engineering, Inc.
Street Address: 10874 Hope Street
City, State, Zip Code: Cypress, CA. 90630

Phone: (714) 952-2240
Fax: (714) 952-8733

Manufacturer: TE Connectivity [Formerly Tyco Electronics/AMP, Inc.]
Street Address: 2901 Fulling Mill Road
City, State, Zip Code: Middletown, PA 17057-3163, US

Phone: (800)468-2023
Fax: (717)986-3611

Manufacturer: Tyco Electronics - CII
Street Address: P.O. Box 520
Route 74 East
City, State, Zip Code: Fairview, NC 28739

Phone: (828)338-1000, (800)806-0480, (800)522-6752
Fax: (828)338-1103

Manufacturer: Teledyne Relays
Street Address: 12525 Daphne Avenue
City, State, Zip Code: Hawthorne, CA 90250

Phone: (323)777-0077, (800)284-7007
Fax: (323)241-1287, (323)241-1288

Manufacturer: Wilbrecht LEDCO, Inc.
Street Address: 1400 Energy Park Drive, Suite 18
City, State, Zip Code: St Paul, MN 55108-5248

Phone: (651) 659-0919, (888)323-8751
Fax: (651) 659-9204