### REVISIONS

<table>
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<th>SYMBOL</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVAL</th>
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<td>7/31/92</td>
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### SHEET REVISION STATUS

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### ORIGINATOR

T. Perry/Paramax

DATE: 7/17/92

### APPROVED

S. Archer-Davies/Paramax

DATE: 7/17/92

Relays, Electromagnetic, Hermetically Sealed, High Vibration, 2PDT (2C) Low Level to 1 Ampere (TO-5 Enclosure)

### CODE 311 APPROVAL

P. Jones/GSEP

DATE: 7/20/92

### CODE 311 SUPERVISORY APPROVAL

G. P. Kramer, Jr./GSEP

DATE: 7/20/92

### ADDITIONAL APPROVAL

S-311-P-754/05

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GODDARD SPACE FLIGHT CENTER
GREENBELT, MARYLAND 20771

CAGE CODE: 25306
GSFC DETAIL SPECIFICATION

RELAYS, ELECTROMAGNETIC, HERMETICALLY SEALED, HIGH VIBRATION, 2PDT (2C), LOW LEVEL TO 1 AMPERE (TO-5 ENCLOSURE)

The requirements for procuring the relays described herein shall consist of this specification and the current revision of GSFC S-311-P-754 except failure rate level "M" is not applicable.

Table I. Part Numbers and characteristics

<table>
<thead>
<tr>
<th>GSFC Part Number</th>
<th>Similar to MIL Part Number</th>
<th>Terminal Type</th>
<th>Coil Voltage (Nominal)</th>
<th>Pickup Voltage (max.)</th>
<th>Dropout Voltage (min.)</th>
<th>DC Coil Resistance (ohms)</th>
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<tbody>
<tr>
<td>G311P754/05-001</td>
<td>N/A</td>
<td>Wire Leads</td>
<td>6.0 Vdc</td>
<td>5.5 Vdc</td>
<td>0.18 Vdc</td>
<td>70 ± 10%</td>
</tr>
<tr>
<td>G311P754/05-002</td>
<td>N/A</td>
<td>Wire Leads</td>
<td>9.0 Vdc</td>
<td>8.2 Vdc</td>
<td>0.35 Vdc</td>
<td>155 ± 10%</td>
</tr>
<tr>
<td>G311P754/05-003</td>
<td>N/A</td>
<td>Wire Leads</td>
<td>12.0 Vdc</td>
<td>11.0 Vdc</td>
<td>0.41 Vdc</td>
<td>235 ± 10%</td>
</tr>
<tr>
<td>G311P754/05-004</td>
<td>N/A</td>
<td>Wire Leads</td>
<td>18.0 Vdc</td>
<td>16.5 Vdc</td>
<td>0.59 Vdc</td>
<td>610 ± 10%</td>
</tr>
<tr>
<td>G311P754/05-005</td>
<td>N/A</td>
<td>Wire Leads</td>
<td>26.5 Vdc</td>
<td>22.0 Vdc</td>
<td>0.89 Vdc</td>
<td>1130 ± 10%</td>
</tr>
</tbody>
</table>

Notes:

1. Relays must be provided with unpainted enclosures.
2. Terminal numbers in circuit diagram are for reference only.

Figure 1. Configuration and circuit diagram.
REQUIREMENTS:

Operating Temperature Range: -65°C to +125°C

Contact Load Ratings:
- Resistive - 1 amp/28 Vdc
- Inductive - 200 mA/28 Vdc (320 mH)
- Lamp - 100 mA/28 Vdc

Coil Operating Power: 620 mw typ. at rated voltage, +25°C

Other Requirements: Consult the Parts Branch Specialist.

Seal
- Fine leak test ....................... 1 x 10^-8 cc/sec max.
- Gross leak test ....................... not applicable

Electrical measurements
- Insulation resistance .................. 10,000 Mohm min.
- Dielectric strength ..................... 500 Vrms, 60 Hz
- Coil resistance ........................ see Table I
- Pickup voltage ................................ see Table I
- Dropout voltage ........................ see Table I
- Contact resistance - initial ............ 100 milliohms max.
- Contact resistance - after life ........... 200 milliohms max.
- Operate time ............................ 2 ms max.
- Release time ............................. 2 ms max.
- Bounce time ............................. 1.5 ms max.
- Coil transient suppression .......... not applicable
- Neutral screen ........................ not applicable

Vibration
- Sinusoidal ............................. 50 g (10 - 3000 Hz)
- Random ................................. not applicable

High temperature soak ..................... applicable
High temperature run-in .................. not applicable
Low temperature run-in ................... applicable
Room temperature run-in ................ applicable

Seal
- Fine leak test ....................... 1 x 10^-8 cc/sec max.
- Gross leak test ....................... applicable