

**REVISIONS**

SYMBOL	DESCRIPTION	DATE	APPROVAL
-	RELEASED	7/21/92	<i>[Signature]</i>

**SHEET REVISION STATUS**

SH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REV	--	--	--																	
SH	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REV																				

ORIGINATOR <i>T. Perry</i> T. Perry/Paramax	DATE 7/17/92	FSC: 5945
APPROVED <i>[Signature]</i> S. Archer-Davies/Paramax	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 <i>[Signature]</i>	7-20-92	
CODE 311 SUPERVISORY APVL G. P. Kramer, Jr. <i>[Signature]</i>	7/20/92	
ADDITIONAL APPROVAL		

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

CAGE CODE: 25306

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## 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

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

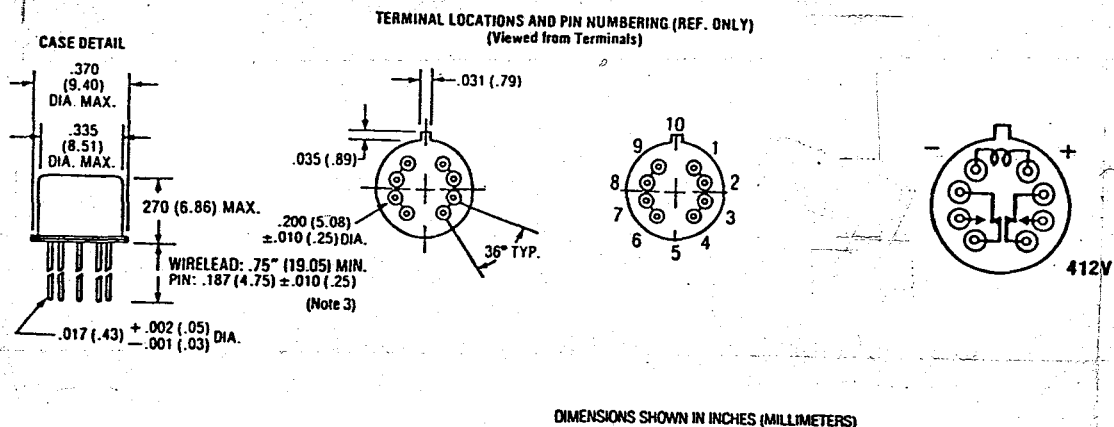


Figure 1. Configuration and circuit diagram.

**Notes:**

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

**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<sup>-8</sup> cc/sec max.
- Gross leak test ..... not applicable

**Electrical measurements**

- Insulation resistance ..... 10,000 Mohm min.
- Dielectric strength ..... 500 V<sub>rms</sub>, 60 Hz
- Coil resistance ..... see Table I
- Pickup voltage ..... see Table I
- Dropout voltage ..... see Table I
- Contact resistance - initial..... 100 milliohms max.
- 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<sup>-8</sup> cc/sec max.
- Gross leak test ..... applicable