

REVISIONS																				
SYMBOL	DESCRIPTION														DATE	APPROVAL				
--	Released														6/12/92	SAN				
A	Drawing revised and redrawn														9/2/92	SAN				
B	Revised per RN A-157														1/8/09	JS				
ORIGINAL SIGNATURES ON FILE																				
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	B	B	B	B																
SH	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REV																				
ORIGINATOR: T. Perry/Paramax												DATE 06/12/92			FSC: 5945 Relays, Electromagnetic, Hermetically Sealed, 4PDT (4C), Latching, Low level to 2 Amperes (0.150 inch Terminal Spacing)					
APPROVED: S. Archer-Davies/Paramax												06/12/92								
CODE 311 APPROVAL: P. Jones/GSFC												06/12/92								
CODE 311 SUPERVISORY APPROVAL: G. P. Kramer, Jr./GSFC												06/12/92								
ADDITIONAL APPROVAL:															S-311-P-754/08					
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION GODDARD SPACE FLIGHT CENTER GREENBELT, MARYLAND 20771																				
CAGE CODE: 25306															Page 1 of 4					

GSFC DETAIL SPECIFICATION

RELAYS, ELECTROMAGNETIC, HERMETICALLY SEALED, 4PDT (4C), LATCHING,
LOW LEVEL TO 2 AMPERES (0.150 INCH TERMINAL SPACING)

The requirements for procuring the relays described herein shall consist of this specification and the current revision of GSFC S-311-P-754.

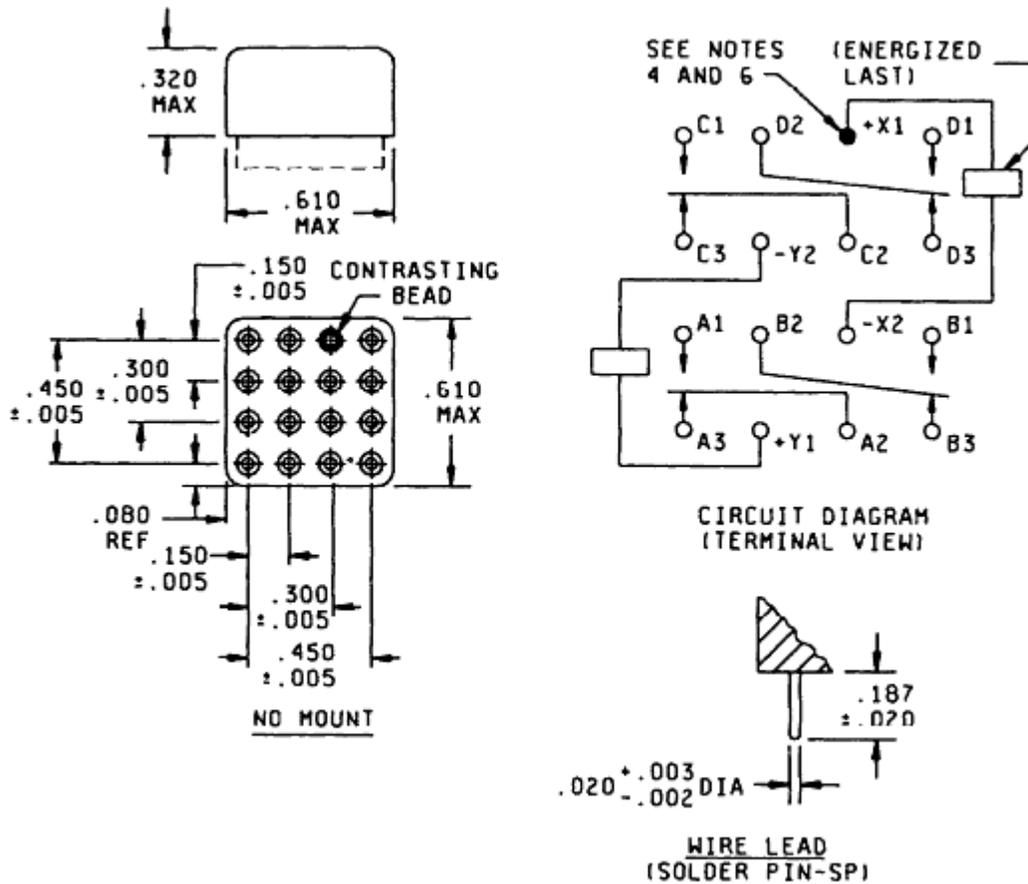


Figure 1. Dimensions, configuration and circuit diagram.

Inches	mm	Inches	mm
.001	0.03	.150	3.81
.002	0.05	.187	4.75
.003	0.08	.300	7.62
.005	0.13	.320	8.13
.020	0.51	.450	11.43
.050	1.27	.500	12.70
.080	2.03	.610	15.49
.094	2.39	.850	21.59
.096	2.44	1.062	26.97

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is $\pm .010$ inches (0.25 mm).
3. Metric equivalents are given for general information only.
4. Terminal indicated shall be identified by a contrasting bead. Relays shall have (+) and (-) signs placed on the circuit diagram as shown.
5. Terminal numbers in circuit diagram are for reference only. Numbers do not appear on relay.
6. Energizing the indicated coil with the indicated polarity and voltage shall cause the relay contacts to assume the position shown.
7. Coil symbol optional in accordance with MIL-STD-1285.

Table 1. Dash numbers and characteristics. 1/ 2/

GSFC PART NUMBER 4/	Similar to MIL Part Number 4/	Mount	Terminal	Coil Voltage		Coil resistance at +25° C Tolerance $\pm 10\%$ (ohms)	Specified pickup (latch/ reset) Value (voltage) (V dc) 3/	
				Rated V dc	MAX V dc		+25° C	Over temp. range
G311P754/08-001	M39016/31-001	No mount	Wire lead (SP)	6.0	7.2	37	2.6	3.8
G311P754/08-002	M39016/31-002	No mount	Wire lead (SP)	12.0	14.5	145	5.2	7.6
G311P754/08-003	M39016/31-003	No mount	Wire lead (SP)	26.5	35.0	975	13.5	18.0

1/ Each relay possesses high and low level capabilities. However, relays previously tested or used above 10 mA resistive at 6 V dc maximum or peak ac open circuit are not recommended for subsequent use in low level applications.

2/ **WARNING:** When latching relays are installed in equipment, the latch and reset coils should not be pulsed simultaneously. Coils should not be pulsed with less than the rated coil voltage.

3/ A 10% increase in latch and reset voltages is allowed during and after rated life.

4/ Procurement is to the GSFC S-311-P-754/08 dash numbers ONLY. MIL dash numbers are for reference only and do not comply with all of the requirements in the GSFC S-311-P-754 and GSFC S-311-P-754/08 specifications.

REQUIREMENTS:

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

Other: All requirements (contact ratings, life test requirements, environmental data, etc.) shall be as specified in MIL-PRF-39016/31 except as detailed or modified herein.

Electrical Measurements

Insulation resistance: 10,000 Mohm min.
Dielectric strength: 500 V_{rms}, 60 Hz
Coil resistance: See Table 1
Pickup voltage (latch & reset): See Table 1
Dropout voltage: Not applicable
Contact resistance: 50 milliohms max.
Operate time: 4 ms max.
Release time: Not applicable.
Bounce time: 2 ms max.
Coil transient suppression: Not applicable
Neutral screen: Applicable

Vibration

Sinusoidal: 30 g (55 – 3,000 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: 1×10^{-8} cc/sec max.
Gross leak test: Applicable

Outgassing

Marking ink: Not applicable.
Adjunct sealant: Not applicable.

Enclosures: Relays must be provided with unpainted enclosures.