



Applicable sockets:
SO-1059-8914

Application Notes:
101
102
103E
007

• All welded construction

• Contact arrangement **3 PST configuration with 1 PDT, 2 Amp auxiliary contacts in one inch cube**

• Qualified to **MIL-PRF-6106**

PRINCIPLE TECHNICAL CHARACTERISTICS

• **Contacts rated at** 28 Vdc and 115/200 Vac, 400 Hz, 3Ø

• **Weight** 0.188 lb max

• **Dimensions** 1.01in x 1.01in x 1.00in

• **Hermetically sealed, corrosion resistant metal can. Detail specifications and ordering data appear on the following pages.**

CONTACT ELECTRICAL CHARACTERISTICS

Contact rating per pole and load type [1]	Load current in Amps			
	@28 Vdc	@115 Vac 400 Hz	@115/200 Vac, 400 Hz, 3Ø	@115/200 Vac, 60 Hz, 3Ø [10]
Resistive [2]	25	25	25	2.5
Inductive [3]	12	15	15	2.5
Motor	10	10	10	2
Lamp	5	5	5	1
Overload	50	80	80	N/A
Rupture	60	100	100	N/A
Contact rating of auxiliary contacts at 28 Vdc or 115 Vac, 400 Hz		Resistive 2 Amp	Inductive 1 Amp	Lamp 0.5 Amp

COIL CHARACTERISTICS (Vdc)

CODE	A	B	C	M	N [8]	R [8]	V [8]
Nominal operating voltage	28	12	6	48	28	12	6
Maximum operating voltage	29	14.5	7.3	50	29	14.5	7.3
Maximum pickup voltage							
- Cold coil at +125° C	18	9	4.5	36	18	9	4.5
- During high temp test at +125° C	19.8	9.9	5	38	19.8	9.9	5
- During continuous current test at +125° C	22.5	11.25	5.7	42	22.5	11.25	5.7
Maximum drop-out voltage	7	4.5	2.5	14	7	4.5	2.5
Coil resistance $\Omega \pm 10\%$ at +25° except types "C" & "V" +20%, -10%	290	70	18	890	290	70	18

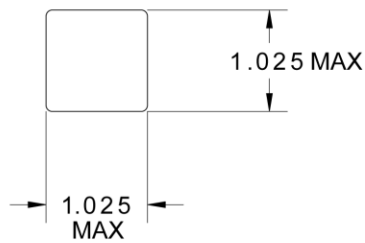
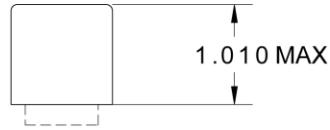
GENERAL CHARACTERISTICS

Temperature range	-70°C to +125°C
Minimum operating cycles (life) at rated load	50,000 [3]
Minimum operating cycles (life) at 25% rated load	200,000
Dielectric strength at sea level	
- All circuits to ground and circuit to circuit	1250 Vrms
- Coil to ground	1000 Vrms [4]
Dielectric strength at altitude 80,000 ft	500 Vrms [5]
Insulation resistance	
- Initial (500 Vdc)	100 M Ω min
- After environmental tests (500 Vdc)	50 M Ω min
Sinusoidal vibration (A and D mounting)	0.12 d.a. / 10 to 70 Hz 30G / 70 to 3000 Hz
Sinusoidal vibration (J mounting)	0.12 d.a. / 10 to 57 Hz 20G / 57 to 3000 Hz
Random vibration	
- Applicable specification	MIL-STD-202
- Method	214
- Test condition - A and D mounting	1G (0.4G ² /Hz, 50 to 2000 Hz)
- Test condition – J mounting	1E (0.2G ² /Hz, 50 to 2000 Hz)
- Duration	15 minutes each plane
Shock (A, D and W mounting)	200G / 6 ms
Shock (J mounting)	100G / 6 ms
Maximum contact opening time under vibration and shock	10 μ s
Operate time at nominal voltage @25°C	15 ms max
Release time at nominal voltage @25°C	15 ms max
Contact make bounce at nominal voltage @25°C	
- Power contacts @25°C	1 ms max
- Auxiliary contacts @25°C	4 ms max
Contact release break bounce at nominal voltage @25°C – Power contacts	0.1 ms max [9]

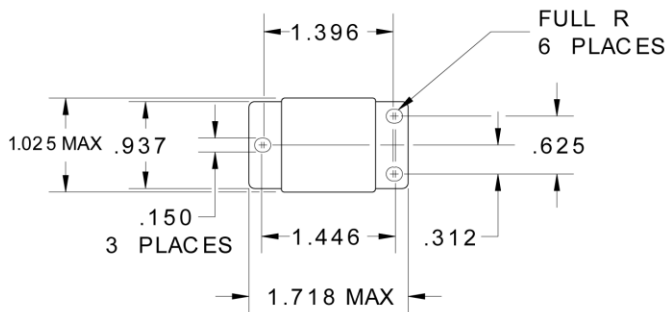
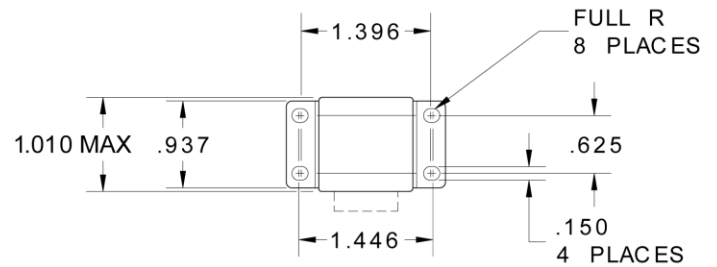
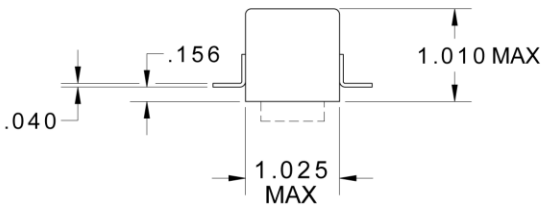
Unless otherwise noted, the specified temperature range applies to all relay characteristics.

Dimensions in inches
 Tolerances, unless otherwise specified
 XXX ± 0.010 in
 XX ± 0.03 in

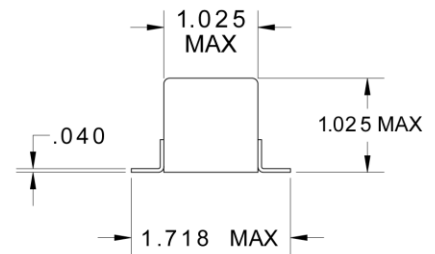
MOUNTING STYLES



MOUNTING STYLE A

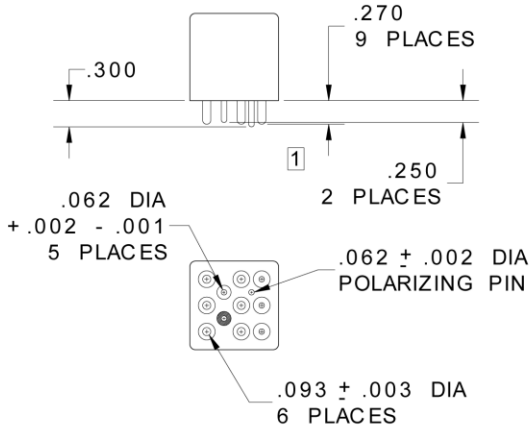


MOUNTING STYLE D



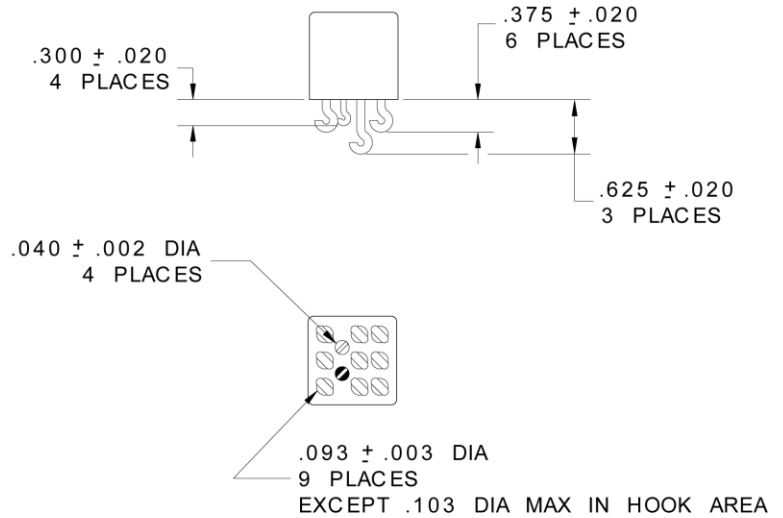
MOUNTING STYLE J

TERMINAL TYPES

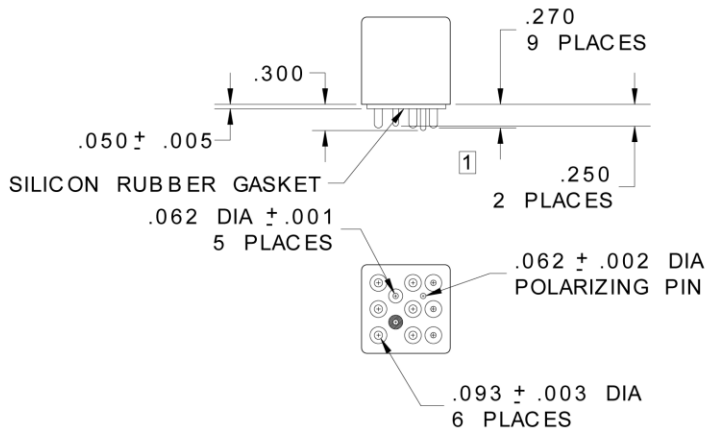


TERMINAL TYPE 1

FINISH:
BODY- LEACH BLUE
TERMINALS- TIN/ LEAD



TERMINAL TYPE 2

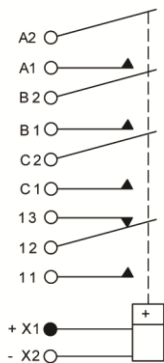


TERMINAL TYPE 4

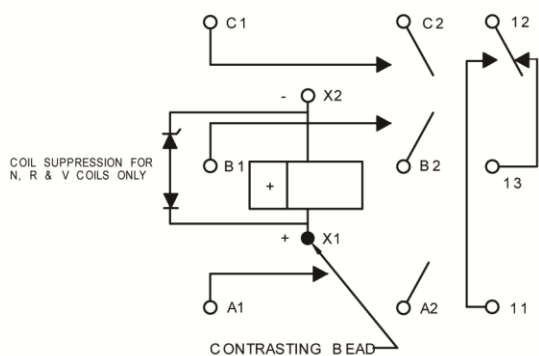
FINISH:
BODY- LEACH BLUE
TERMINALS- GOLD PLATED
POLARIZING PIN- TIN/ LEAD

DIAGRAMS

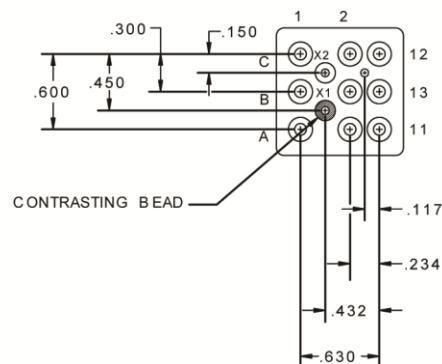
SCHEMATIC DIAGRAM



WIRING DIAGRAM



STANDARD TERMINAL LAYOUT

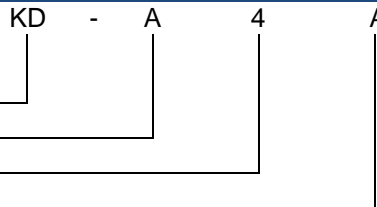


TOL: .XX ±.03; .XXX ±.010

NUMBERING SYSTEM

Basic series designation

1. Mounting styles (A, D, J)
2. Terminal types (1, 2, 4,)
3. Coil voltage, see coil characteristics (A, B, C, M, N, R or V)



NOTES

1. Standard Intermediate current test applicable
2. For full rated load, max. temp. and altitude use no. 12 wire or larger.
Solder hook relays to be mounted to limit mounting bracket temp. to 160° C.
3. DC inductive load 10,000 cycles, AC inductive load 20,000 cycles.
4. Dielectric of auxiliary contact gap after life tests: 750 Vrms, 60 Hz.
5. 500 Vrms with silicone gasket compressed, 350 Vrms all other conditions.
6. Applicable military specification: MIL-PRF-6106 and M6106/13.
7. Special models available: Dry circuit, high reliability testing, etc.
8. "N, R & V" coils have back EMF suppression to - 42 volts maximum.
9. Applies to "N, R & V" coils and main contacts only.
10. 60 Hz load life, 10,000 cycles.
11. Time current relay characteristics per MIL-PRF-6106.
12. Relay will not operate, but will not be damaged by application of reverse polarity to coil.

For any inquiries, please contact your local sales representative: leachcorp.com