

Applicable sockets:
SO-1061-8916

Application Notes:
102
007

- All welded construction

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

- Designed to the performance standards of **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 factory for information on MIL-qualified part numbers.**

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 [9]	@230/400 Vac 400 Hz [11]
Resistive [2]	25	25	25	2.5	5
Inductive [3]	12	15	15	2.5	5
Motor	10	10	10	2	2
Lamp	5	5	5	1	2
Overload	50	80	80	N/A	N/A
Rupture	60	100	100	N/A	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	Vac 400 Hz		Vac 50 thru 400 Hz		Vac 400 Hz
	E	F	J	K	T [11]
Nominal operating voltage	28	115	28	115	230
Maximum operating voltage	30	122	30	122	248
Maximum pickup voltage					
- Cold coil at +125° C	22	90	23	95	180
- During high temp test at +125° C	24.4	95.4	24.6	100	185
- During continuous current test at +125° C	25.6	103.5	25.9	105	195
Maximum drop-out voltage	10	30	10	30	60
Coil current maximum milliAmperes at +25° C	225	40	120	28	22

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, D, E and W 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, D and E mounting	1G (0.4G ² /Hz, 50 to 2000 Hz)
- Test condition – G and J mounting	1E (0.2G ² /Hz, 50 to 2000 Hz)
- Duration	15 minutes each plane
Shock (A, D, E and W mounting)	200G / 6 ms
Shock (J mounting)	100G / 6 ms
Maximum contact opening time under vibration and shock	10 μs
Operate time at nominal voltage @25°C	20 ms max
Release time at nominal voltage @25°C	50 ms max
Contact make bounce at nominal voltage	
- Power contacts@25°C	1 ms max
- Auxiliary contacts @25°C	4 ms max
Contact release break bounce at nominal voltage @25°C	0.1 ms max [8]
Weight maximum	0.188 lb

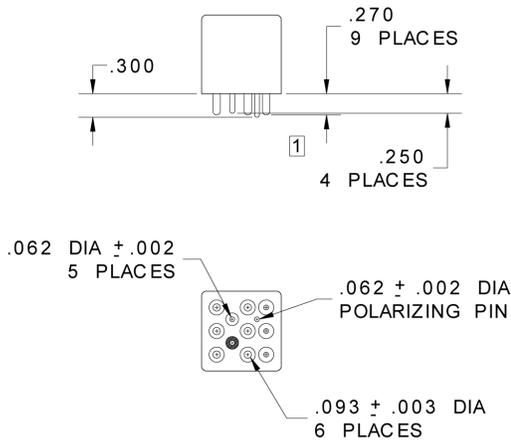
Unless otherwise noted, the specified temperature range applies to all relay characteristics.

Dimensions in inches
Tolerances, unless otherwise specified,
XX ± 0.03 in
XXX ± .01 in

MOUNTING STYLES

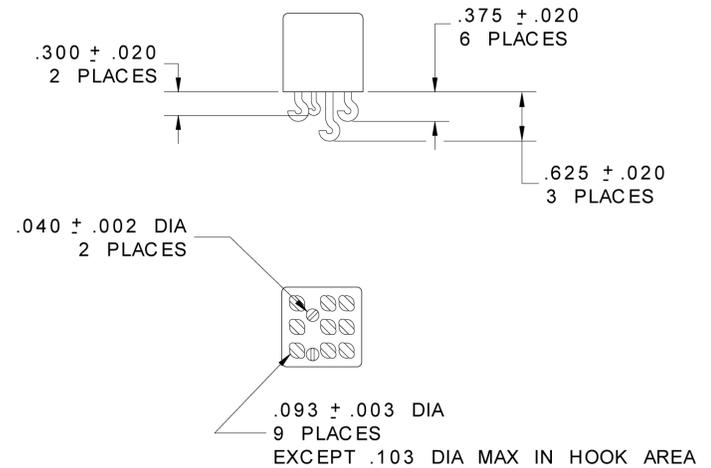
Use this mounting style to mate with Leach socket

TERMINAL TYPES

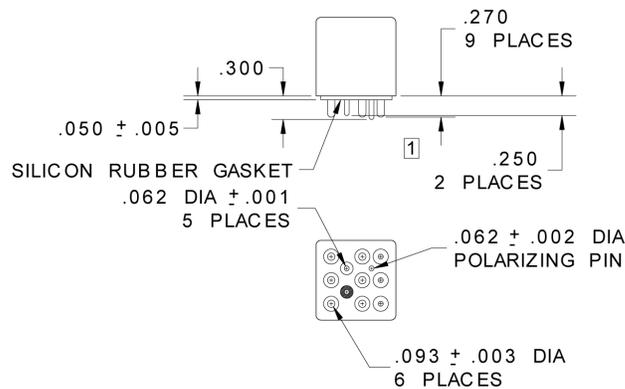


TERMINAL TYPE 1

FINISH:
CASE- PAINTED LEACH BLUE
TERMINALS- TIN/ LEAD



TERMINAL TYPE 2

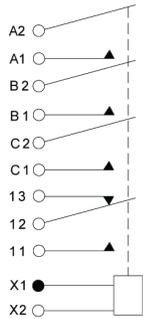


TERMINAL TYPE 4

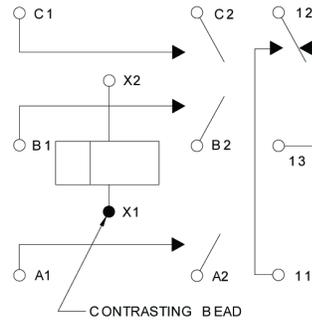
TYPE 4 TERMINALS AVAILABLE
ONLY WITH MOUNTING "A" OR "E"
FINISH:
BODY- LEACH BLUE
TERMINALS- GOLD PLATED
POLARIZING PIN- TIN/ LEAD

DIAGRAMS

SCHEMATIC DIAGRAM

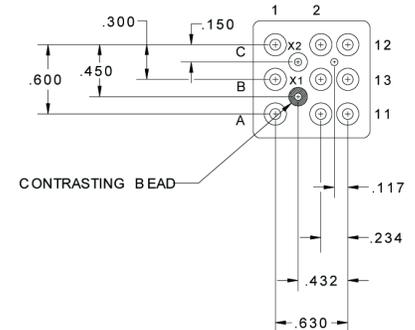


WIRING DIAGRAM

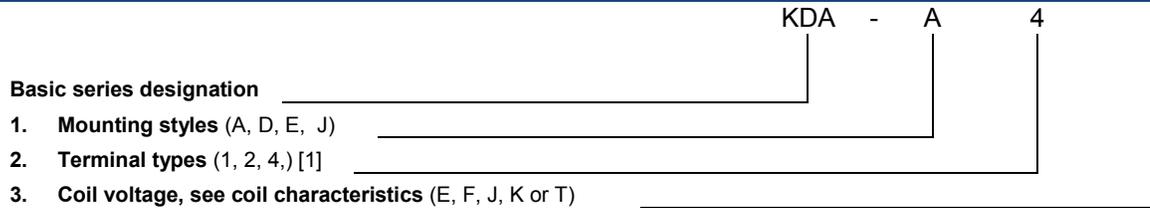


TOL: .XX ±.03; .XXX ±.010

STANDARD TERMINAL LAYOUT



NUMBERING SYSTEM



NOTES

1. Standard Intermediate current test applicable.
2. For full rated load, max. temp. and altitude use no. 12 wire or larger.
Relays to be mounted to limit mounting bracket temp. to 135° 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.
5. 500 Vrms with silicone gasket compressed, 350 Vrms all other conditions.
6. Reference military specification: MIL-PRF-6106, and MIL-PRF-6106/13.
7. Special models available: dry circuit, established reliability testing, etc.
8. Applicable to power contacts only.
9. 60 Hz load life, 10,000 cycles.
10. Time current relay characteristics per MIL-PRF-6106.
11. Temperature range:
Non-operating -62°C to +95°C
Operating -54°C to +71°C

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