

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

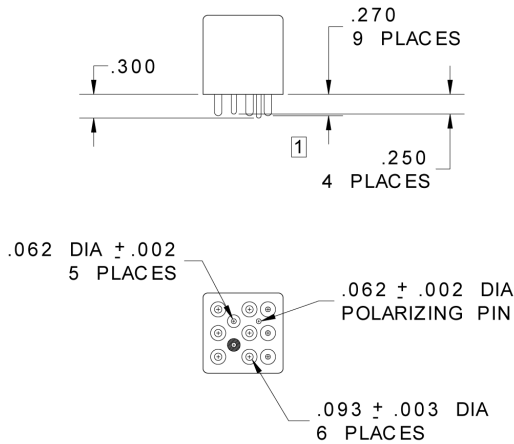
| | |
|--|--|
| Temperature range | -70°C to +125°C |
| Minimum operating cycles (life) at rated load | 50,000 [3] |
| Minimum operating cycles (life) at 25% rated load | 200,000 |
| Dielectric strength at sea level | |
| - All circuits to ground and circuit to circuit | 1250 Vrms |
| - Coil to ground | 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

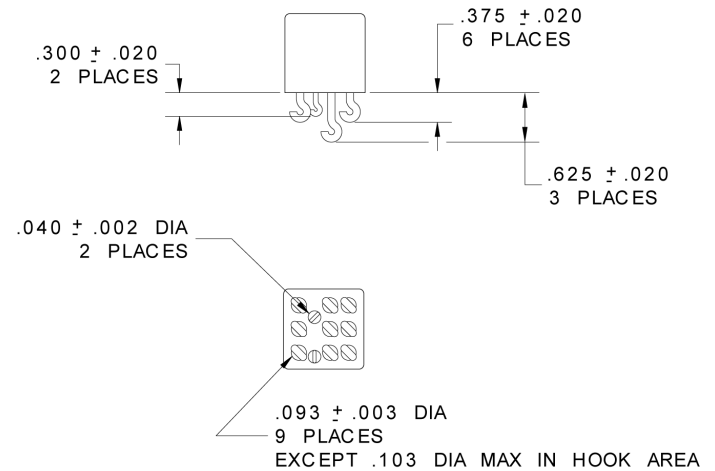
MOUNTING STYLES

TERMINAL TYPES

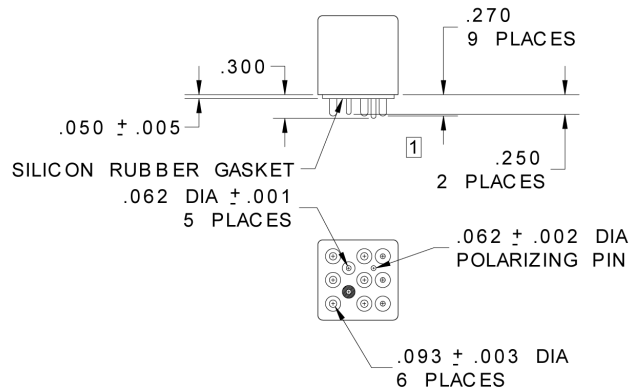


TERMINAL TYPE 1

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



TERMINAL TYPE 2

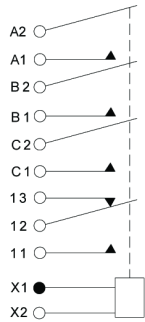


TERMINAL TYPE 4

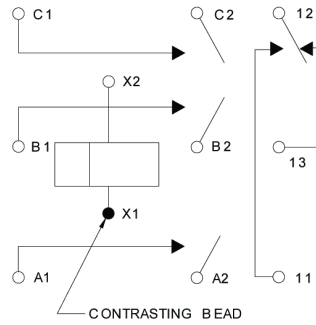
TYPE 4 TERMINALS AVAILABLE
ONLY WITH MOUNTING "A" OR "E"
FINISH:
BODY- LEACH BLUE
TERMINALS- GOLD PLATED
POLARIZING PIN- TIN/ LEAD

DIAGRAMS

SCHEMATIC DIAGRAM

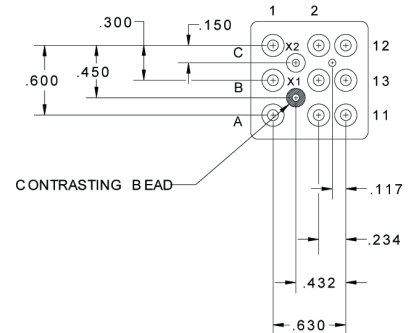


WIRING DIAGRAM

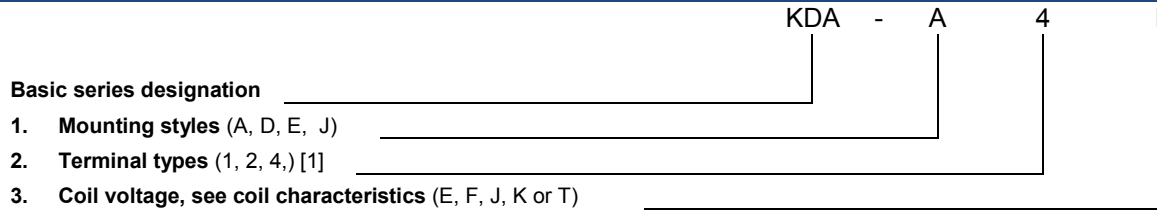


TOL: .XX ±.03; .XXX ±.010

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