



**Applicable sockets:**  
SO-1063-9036

**Application Notes:**  
001  
102  
103E  
007

- Polarized, latching hermetically sealed relay

• Contact arrangement	1 PDT
• Coil supply	Direct current
• Qualified or in accordance with	MIL-PRF-6106/20
• Available in SPACE and Hi-REL quality	

## PRINCIPLE TECHNICAL CHARACTERISTICS

• Contacts rated at	25Amps / 28 Vdc and 115/200 Vac, 400Hz 3Ø
• Weight	0.10 lbs. max
• Dimensions	1.02 x 1.01 x 0.5 in max
• Balanced-force design, all welded construction	
• Hermetically sealed, corrosion protected metal can	
• No make before break	
• Special models available upon request	

## CONTACT ELECTRICAL CHARACTERISTICS

Minimum operating cycles	Type of load	28 Vdc	115 Vac /400 Hz 1Ø	115 Vac /60 Hz 3Ø
50,000 cycles	Resistive load	25A	25A	2.5A
10,000 cycles	Inductive load	12A	15A	2.5A
50,000 cycles	Motor load	10A	10A	2A
50,000 cycles	Lamp load	5A	5A	1A
50 cycles	Resistive overload	50A	80A	-
50 cycles	Rupture resistive	60A	100A	-

## COIL CHARACTERISTICS (Vac)

CODE	A	B	C	M	N	R	V
Nominal operating voltage	28	12	6	48	28	12	6
Maximum operating voltage at +125°C	29	14.5	7.3	50	29	14.5	7.3
Maximum pickup voltage (Cold coil)							
- 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
Coil resistance in $\Omega \pm 10\%$ at +25°C	600	150	38	1600	600	150	38

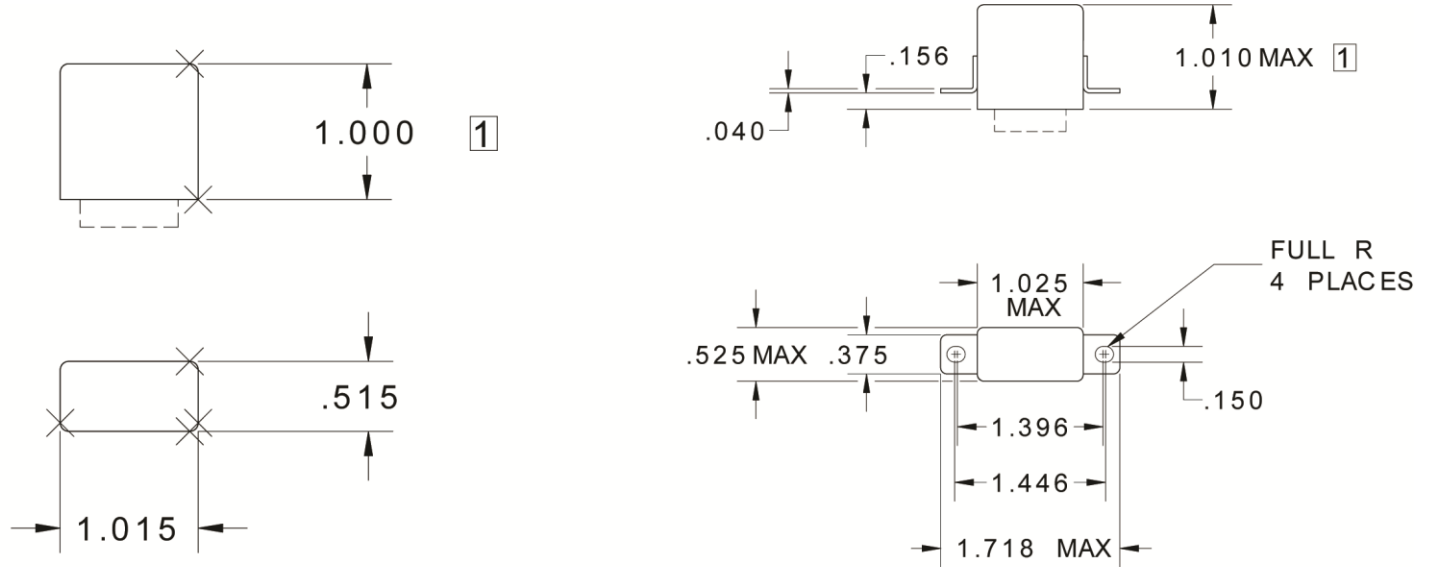
## GENERAL CHARACTERISTICS

Temperature range	-70°C to +85°C
Dielectric strength at sea level all points	
- All circuits to ground and circuit to circuit	1250 Vrms / 50 Hz
- Coil to ground	1000 Vrms / 50 Hz
Dielectric strength at altitude 25.000 m (all points)	500 Vrms / 50Hz (500 Vrms gasket compressed)
<b>Insulation resistance</b>	
- Initial (500 Vdc)	100 M $\Omega$ min
- After environmental tests (500 Vdc)	50 M $\Omega$ min
Sinusoidal vibration (A, D, J and W mounting)	0.12 mm d.a. / 10 - 70 Hz 30 G / 70 - 3000 Hz
<b>Random vibration according to MIL-STD 202 methode 214</b>	
- A, D, J and W mounting	0.4G <sup>2</sup> /Hz, 50 to 2000 Hz
Mechanical shock (A, D and J mounting )	200 G / 6 ms
Mechanical shock (W mounting)	100 G / 6 ms
Maximum contact opening time under vibration and shock	10 $\mu$ sec
Operate time at nominal voltage	10 ms max
Contact make bounce at nominal voltage	1 ms max

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

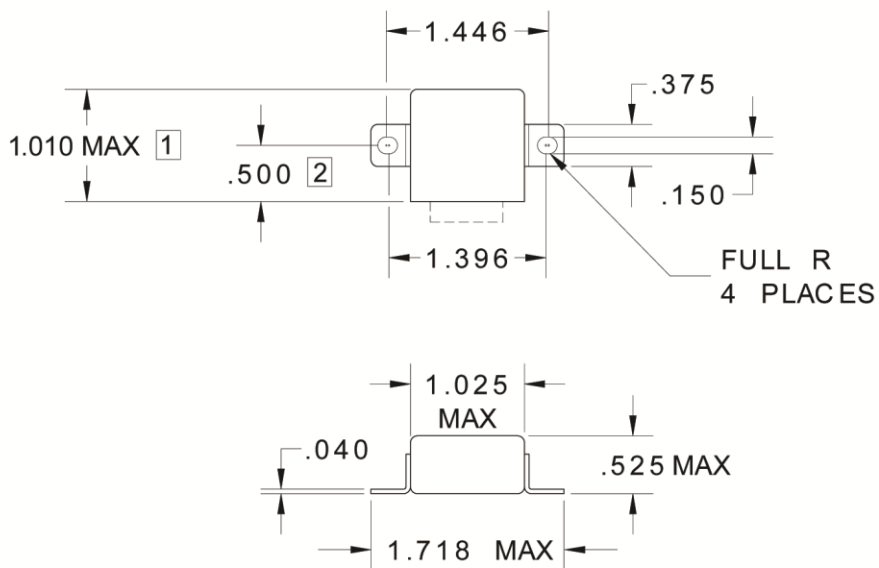
Dimensions in inches  
Tolerances, unless otherwise specified,  
.XX ± 0.3 in., .XXX ± .01

## MOUNTING STYLES



1 DIMENSION IS 1.125 ON SUPPRESSED UNITS  
**MOUNTING STYLE A**

1 DIMENSION IS 1.125 ON SUPPRESSED UNITS  
**MOUNTING STYLE D**

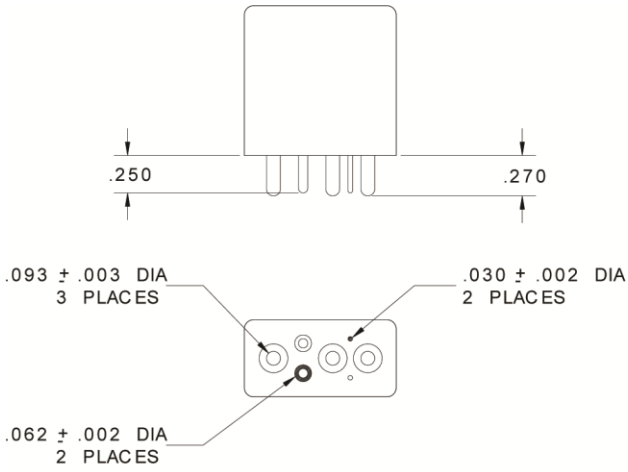


1 DIMENSION IS 1.125 ON SUPPRESSED UNITS

2 DIMENSION IS .550 ON SUPPRESSED UNITS

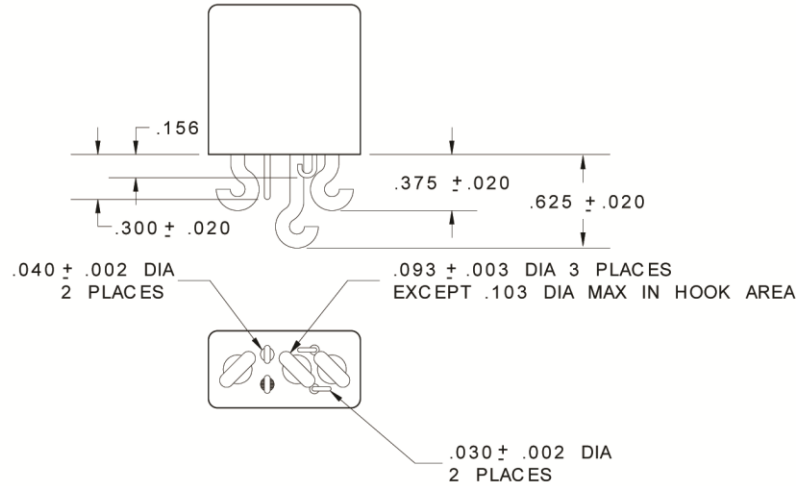
## MOUNTING STYLE J

## TERMINAL TYPES



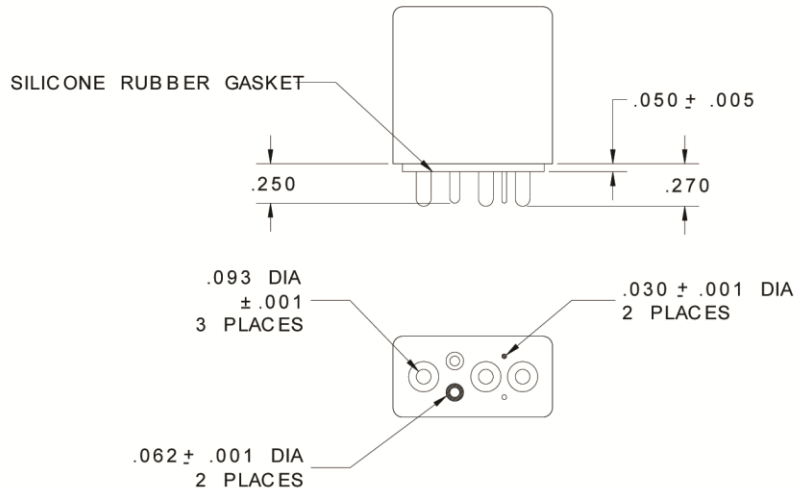
### TERMINAL TYPE 1

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



### TERMINAL TYPE 2

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

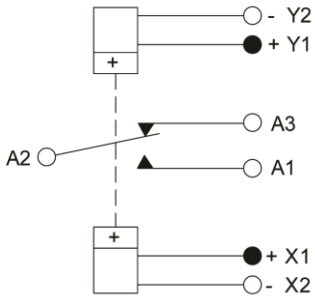


### TERMINAL TYPE 4

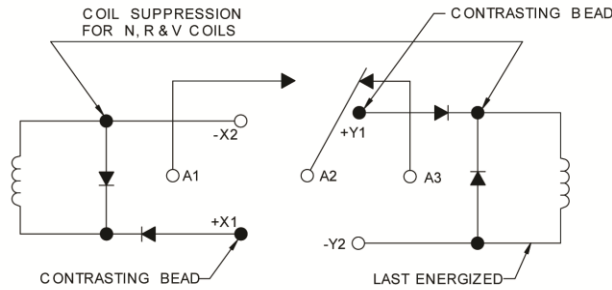
FINISH:  
CASE- PAINTED LEACH BLUE  
TERMINALS- GOLD PLATED

## DIAGRAMS

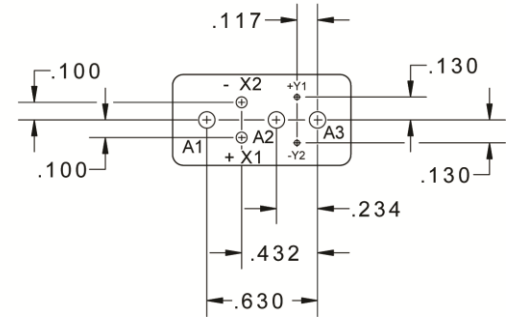
### SCHEMATIC DIAGRAM



### WIRING DIAGRAM



### STANDARD TERMINAL LAYOUT



STANDARD TOLERANCE: =  $\pm 0.010$   
 [1] COIL POLARITY NOT APPLICABLE TO AC VERSIONS.

## NUMBERING SYSTEM

JCL - A 2 A - XXX

### 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)
4. XXX Designators

## NOTES

1. Isolation spacer pads for PCB mounting available on request.
2. For other mounting styles or terminal types, please contact the factory
3. Qualification and quality levels : Contact the factory
4. Coil time constant L/R : 11ms
5. For full rated load, max temp and altitude use no. 12 wire or larger, solder hook relays to be mounted to limit mounting bracket temperature to 135° C.
6. "N" R & V coils have back EMF suppression to - 5 volts maximum.

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