



**Applicable sockets:**  
SO-1066-003

**Application Notes:**

001  
002  
103A  
007  
023

- Magnetic latch operation
- All weld construction

• Contact arrangement **4 PDT**

• Qualified to **MIL-PRF-6106**

### PRINCIPLE TECHNICAL CHARACTERISTICS

• Contacts rated at Low level, 28 Vdc and 115/200 Vac, 400Hz, 3Ø, case grounded

• Weight 0.064 Lbs. max

• Dimensions 0.81 in x 0.81 in x 0.64 in

• Special models available upon request

• Hermetically sealed, corrosion resistant metal can

### CONTACT ELECTRICAL CHARACTERISTICS

Contact rating per pole and load type [1]	Load current in Amps		
	28 Vdc	115 Vac, 400 Hz, 1Ø	115/200 Vac, 400 Hz, 3Ø
Resistive	5	5	5
Inductive [2]	3	5	5
Motor	2	3	3
Lamp	1	1	-
Overload	20	30	30
Rupture	25	40	40
Low level [3]	-	-	-
Time current characteristics [4]	-	-	-

## COIL CHARACTERISTICS (Vdc)

CODE	A	B	C	N [5]	R [5]	V [5]
Nominal operating voltage	28	12	6	28	12	6
Maximum operating voltage	29	14.5	7.3	29	14.5	7.3
Maximum pickup voltage						
- Cold coil at +125° C	18	9	4.5	18	9	4.5
- During high temp test at +125° C	19.8	9.9	5	19.8	9.9	5
- During continuous current test at +125° C	22.5	11.25	5.7	22.5	11.25	5.7
Coil resistance in $\Omega$ $\pm 10\%$ at +25° C except types "C" and "V" +20%, - 10%	600	148	37	600	148	37

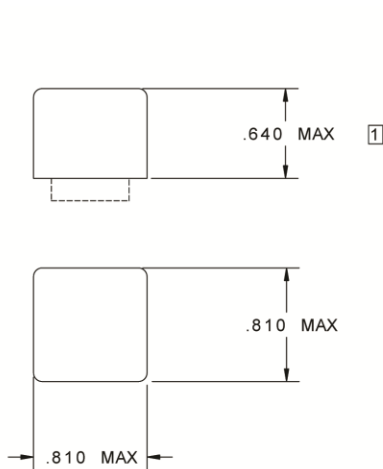
## GENERAL CHARACTERISTICS

Temperature range	-70°C to +125°C [7]
Minimum operating cycles (life) at rated load	100,000 [2]
Minimum operating cycles (life) at 25% rated load	400,000
<b>Dielectric strength at sea level</b>	
- All circuits to ground and circuit to circuit	1000 Vrms
- Coil to ground and coil to coil	500 Vrms
Dielectric strength at altitude 80,000 ft	500 Vrms [6]
<b>Insulation resistance</b>	
- Initial (500 Vdc)	100 M $\Omega$ min
- After environmental tests (500 Vdc)	50 M $\Omega$ min
Sinusoidal vibration (A, D and mounting)	0.12 d.a. / 10 to 70 Hz 30G / 70 to 3000 Hz
Sinusoidal vibration (G and J mounting)	0.12 d.a. / 10 to 57 Hz 20G / 57 to 3000 Hz
<b>Random vibration</b>	
- Applicable specification	MIL-STD-202
- Method	214
- Test condition – A and D mounting	1G (0.4G <sup>2</sup> /Hz, 50 to 2000 Hz)
- Test condition – J and G mounting	1E (0.2G <sup>2</sup> /Hz, 50 to 2000 Hz)
- Duration	15 minutes each plane
Shock (A and D mounting)	200G / 6 ms
Shock (G and J mounting)	100G / 6 ms
Maximum contact opening time under vibration and shock	10 $\mu$ s
Operate time at nominal voltage @ 25°C	6 ms max
Reset time at nominal voltage @ 25°C	6 ms max
Contact make bounce at nominal voltage @ 25°C	0.5 ms max

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

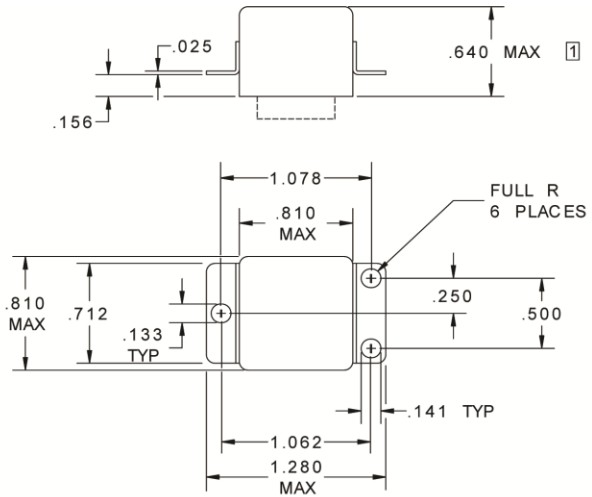
## MOUNTING STYLES

Dimensions in inches  
Tolerances, unless otherwise specified, ± 0.03 in



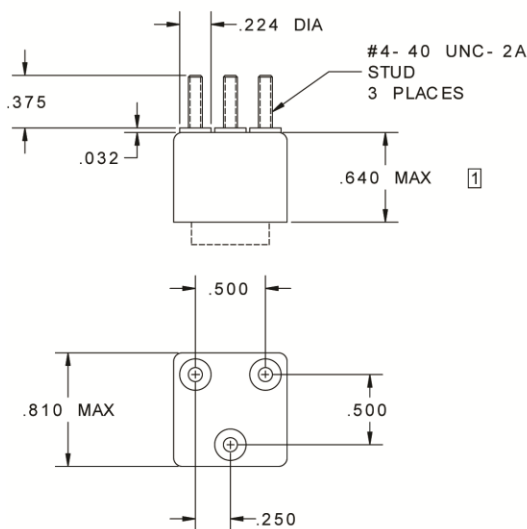
### MOUNTING STYLE A

RELAY HEIGHT MAY BE INCREASED BY .100  
FOR THE COIL SUPPRESSED UNITS.



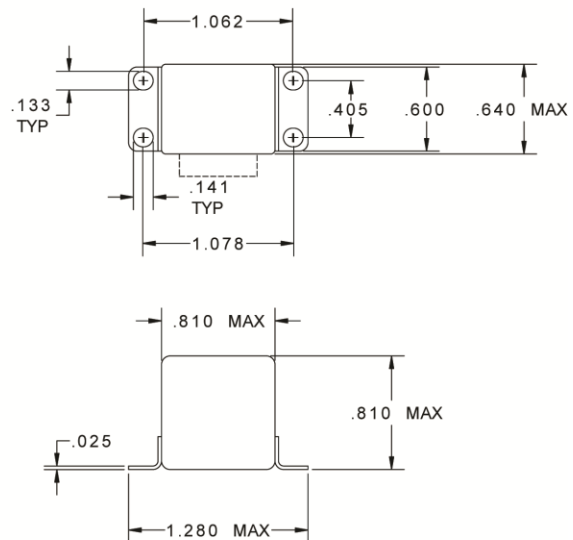
### MOUNTING STYLE D

RELAY HEIGHT MAY BE INCREASED BY .100  
FOR THE COIL SUPPRESSED UNITS.



### MOUNTING STYLE G

RELAY HEIGHT MAY BE INCREASED BY .100  
FOR THE COIL SUPPRESSED UNITS.

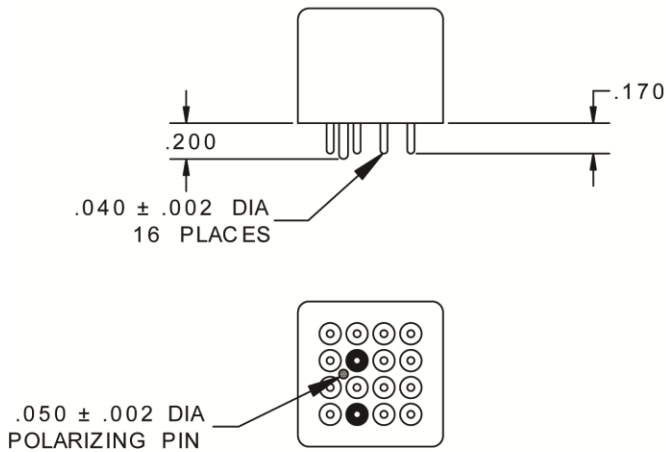


### MOUNTING STYLE J

RELAY HEIGHT MAY BE INCREASED BY .100

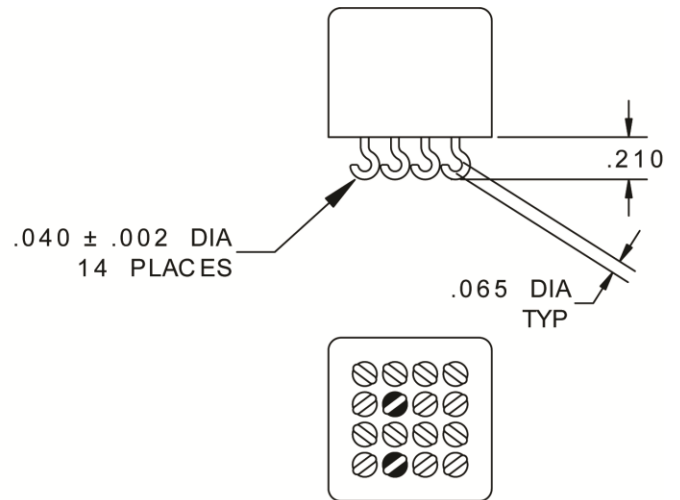
Dimensions in inches  
Tolerances, unless otherwise specified, ± 0.03 in

## TERMINAL TYPES



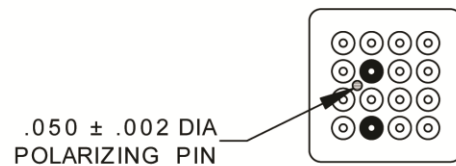
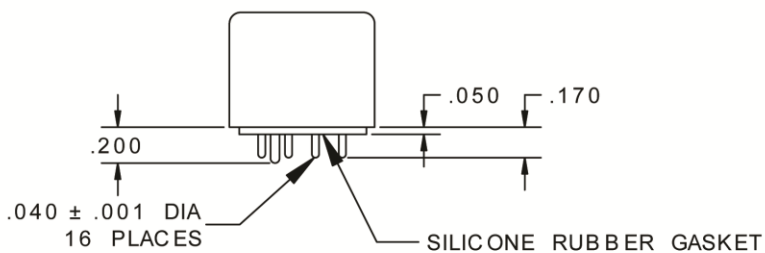
### TERMINAL TYPE 1

FINISH:  
BODY- TIN/ LEAD  
TERMINALS- TIN/ LEAD



### TERMINAL TYPE 2

FINISH:  
BODY- TIN/ LEAD  
TERMINALS- TIN/ LEAD



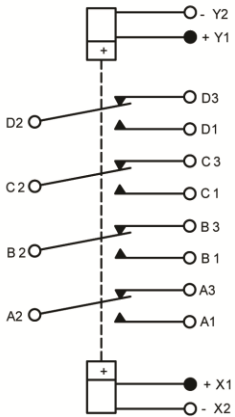
### TERMINAL TYPE 4

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

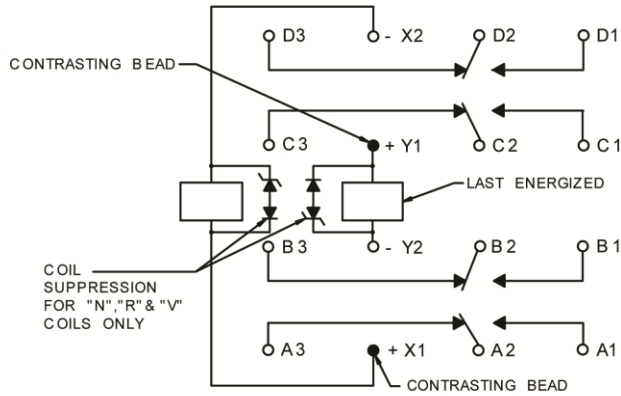
Dimensions in inches  
Tolerances, unless otherwise specified, ± 0.03 in

## DIAGRAMS

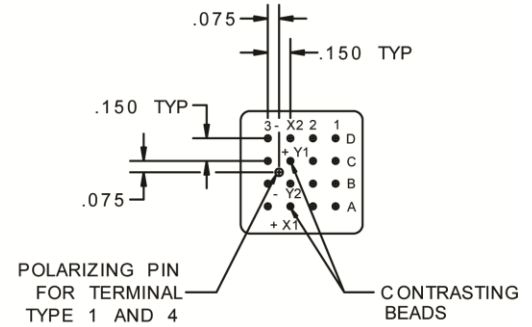
### SCHEMATIC DIAGRAM



### WIRING DIAGRAM

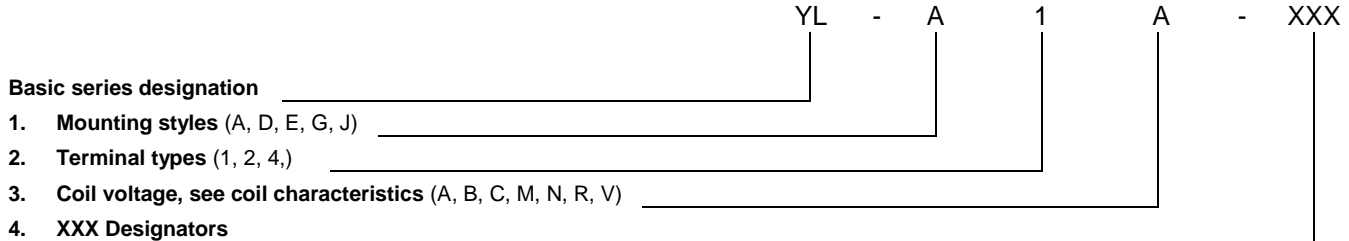


### STANDARD TERMINAL LAYOUT



STD. TOL: .XX ± .03; .XXX ± .010

## NUMBERING SYSTEM



## NOTES

- Standard Intermediate Current test applicable; relay can also switch low level loads while switching any of the other rated loads on adjacent contacts.
- Inductive load life: 20,000 cycles.
- Low level endurance test: contact load of 10 to 50 millivolt, 10 to 50 microamp, 100 Ohm max. contact resistance.
- Refer to MIL-PRF-6106 for details.
- "N" "R" & "V" coils have back EMF suppression to 42 volts maximum.
- 500 Vrms with silicone rubber gasket compressed, 250 Vrms all other conditions.
- Suppressed coils limited to +85° C
- Reference MIL-PRF-6106
- Relay will not be damaged, but may transfer with application of reverse polarity to coil.

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