



**Applicable sockets:**  
SO-1048-8776/8779

**Application Notes:**  
102  
007  
023

- 115 Vac and 28 Vac, 400 Hz and 50/400 Hz Coil Voltages
- All weld construction

• Contact arrangement **4 PDT**

• Qualified to **MIL-PRF-83536**

## PRINCIPLE TECHNICAL CHARACTERISTICS

- Contacts rated at 28 Vdc; 115 Vac, 400 Hz, 1Ø and 115/200 Vac, 400 Hz, 3Ø
- Weight 0.155 lbs. max
- Dimensions 1.10 in x 1.10 in x 1.00 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	@115/200 Vac 400 Hz, 3Ø	@115/200 Vac 60 Hz, 3Ø [2]	@230/400 Vac 400 Hz, 3Ø [8]
Resistive	10	10	10	2.5	5
Inductive [3]	8	8	8	2.5	5
Motor	4	4	4	2	2
Lamp	2	2	2	1	2
Overload	40	60	60	N/A	N/A
Rupture	50	80	80	N/A	N/A

## COIL CHARACTERISTICS (Vac)

CODE	Vac 400 Hz		Vac 50 through 400 Hz		Vac 400 Hz
	E	F	J	K	T [8]
Nominal operating voltage	28	115	28	115	230
Maximum operating voltage @+125°C	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 max milliAmperes at +25° C	225	40	120	28	22

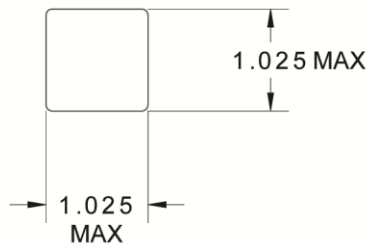
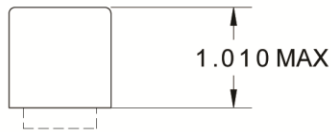
## GENERAL CHARACTERISTICS

Temperature range	-70°C to +125°C
Minimum operating cycles (life) at rated load [5] [6]	100,000
Minimum operating cycles (life) at 25% rated load	400,000
Dielectric strength at sea level - All circuits to ground and circuit to circuit	1250 Vrms
Dielectric strength at sea level - Coil to ground	1000 Vrms
Dielectric strength at altitude 80,000 ft	500 Vrms [5]
Insulation resistance - Initial (500 Vdc)	100 M Ω min
Insulation resistance - 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 (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 - G and J mounting	1E (0.2G <sup>2</sup> /Hz, 50 to 2000 Hz)
- Duration	15 minutes each plane
Shock (A, D and W mounting)	200G / 6 ms
Shock (G and 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@25°C	1 ms max
Contact release break bounce at nominal voltage@25°C	0.1 ms max [6]

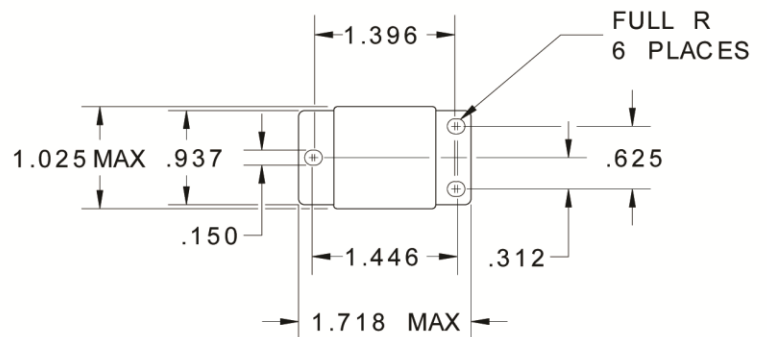
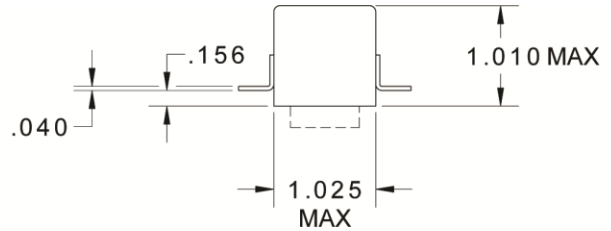
Unless otherwise noted, the specified temperature range applies to all relay characteristics.

Dimensions in inches  
Tolerances, unless otherwise specified XX ± .03; XXX ± .010

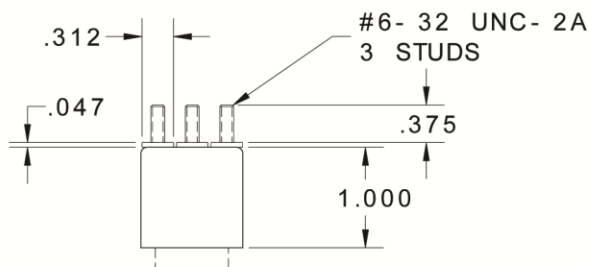
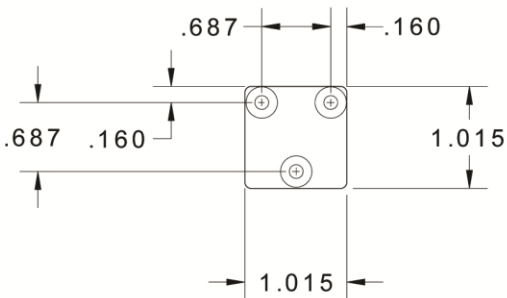
## MOUNTING STYLES



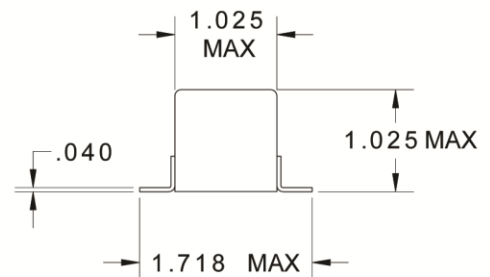
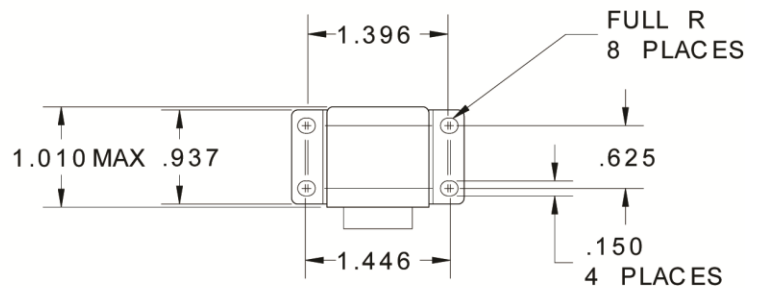
MOUNTING STYLE A



MOUNTING STYLE D



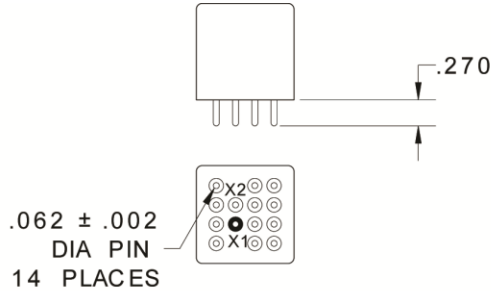
MOUNTING STYLE G



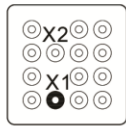
MOUNTING STYLE J

Dimensions in inches  
Tolerances, unless otherwise specified XX ± .03; XXX ± .010

## TERMINAL TYPES



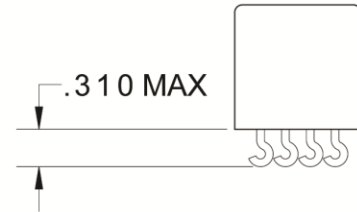
COIL CODE F,K



COIL CODE E,J

## TERMINAL TYPE 1

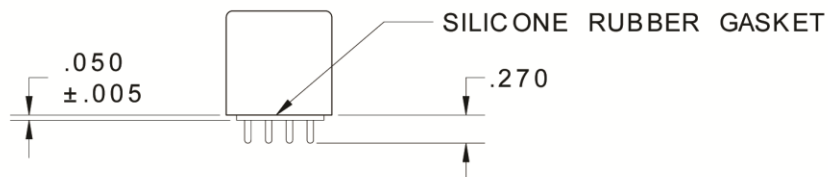
FINISH: TIN/LEAD



.062 ± .002  
DIA PIN  
14 PLACES

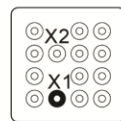
## TERMINAL TYPE 2

FINISH: TIN/LEAD



.062 ± .001  
DIA PIN  
14 PLACES

COIL CODE F,K



COIL CODE E,J

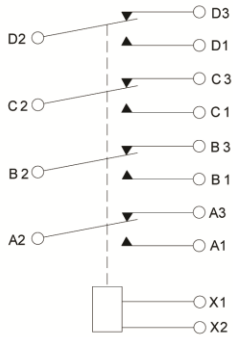
## TERMINAL TYPE 4

FINISH:

CASE: TIN PLATED  
PINS: GOLD PLATED

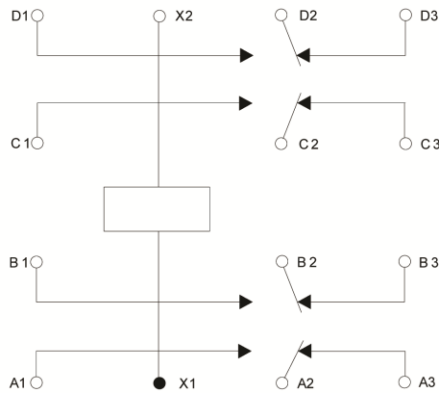
## SCHEMATIC DIAGRAM

### SCHEMATIC DIAGRAM



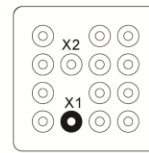
### WIRING DIAGRAM

COIL POLARITY NOT APPLICABLE

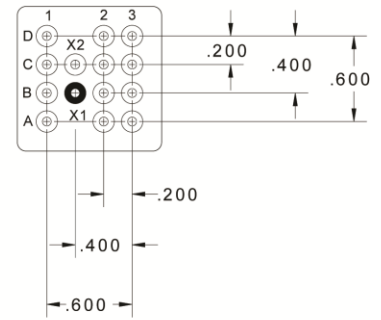


### STANDARD TERMINAL LAYOUT

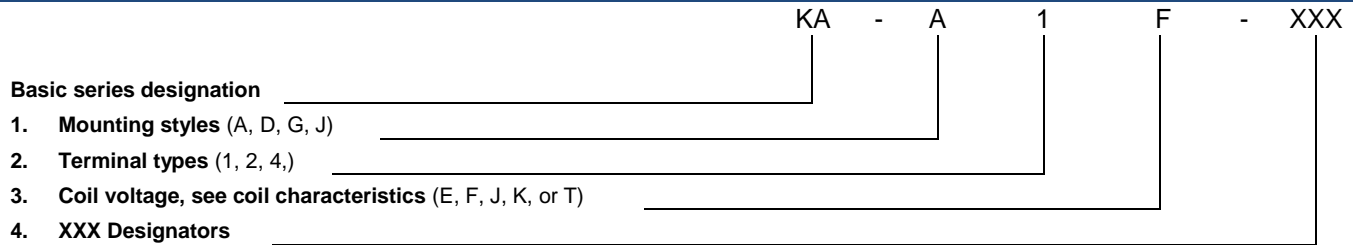
COIL CODE E, J



COIL CODE F, K



## NUMBERING SYSTEM



## NOTES

1. Standard Intermediate current test applicable.
2. 500 Vrms with silicone gasket compressed, 350 Vrms all other conditions.
3. Applicable military specification: MIL-PRF-83536
4. Special models available: Dry circuit, established reliability testing, etc.
5. Inductive load life, 20,000 cycles for AC and 10,000 cycles for DC.
6. 60 Hz load life, 10,000 cycles.
7. Time current relay characteristics per MIL-PRF-83536
8. 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