



Applicable sockets:
SO-1064-10425

Application Notes:

101
102
103B
007
023

- Leach Series III Design
- All welded construction

• Contact arrangement **1 PDT**

• Designed to the performance standards of **MIL-PRF-6106**

PRINCIPLE TECHNICAL CHARACTERISTICS

• **Contacts rated at** Low level to 10A 28 Vdc and 115/200 Vac, 400Hz, 3Ø, case grounded

• **Weight** 0.038 lbs. max

• **Dimensions** 0.41 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	10	10	10
Inductive [2]	6	8	8
Motor	4	4	4
Lamp	2	2	-
Overload	30	60	60
Rupture	32	80	80
Low level [3]	-	-	-
Time current characteristics [4]	-	-	-

COIL CHARACTERISTICS (Vdc)

CODE	A	B	C	M	N [5]	R [5]	V [5]
Nominal operating voltage	28	12	6	48	28	12	6
Maximum operating voltage	29	14.5	7.3	50	29	14.5	7.3
Maximum pickup voltage							
- 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
Maximum drop-out voltage	7	4.5	2.5	14	7	4.5	2.5
Coil resistance in Ω $\pm 10\%$ at +25° C except types "C" and "V" +20%, - 10% $\pm 20\%$	500	125	20	1600	500	125	20

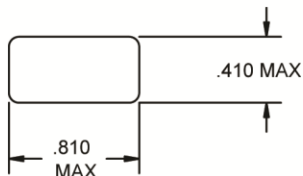
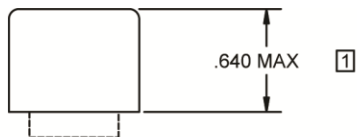
GENERAL CHARACTERISTICS

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

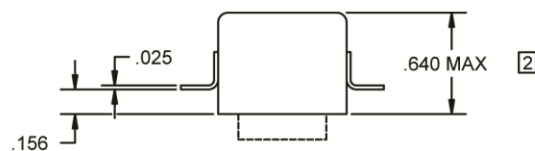
Unless otherwise noted, the specified temperature range applies to all relay characteristics.

Dimensions in inches
Tolerances, unless otherwise specified, XX ± 0.03 in., XXX ± 0.010

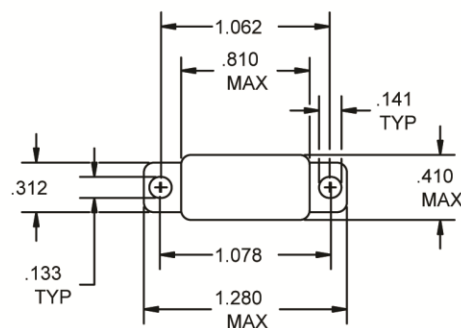
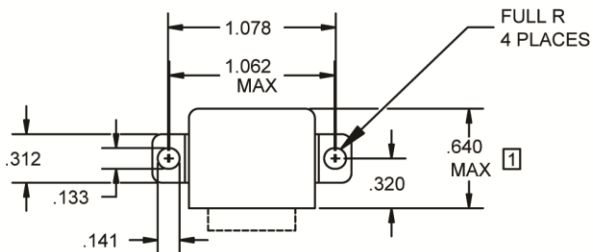
MOUNTING STYLES



1 RELAY HEIGHT MAY BE INCREASED .100 INCH FOR "N" SUPPRESSED COILS

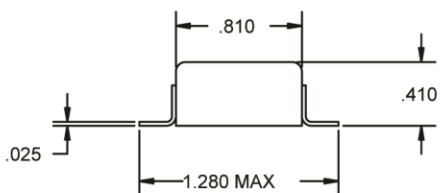


MOUNTING STYLE A



2 RELAY HEIGHT MAY BE INCREASED .100 INCH FOR "N" SUPPRESSED COILS

MOUNTING STYLE D

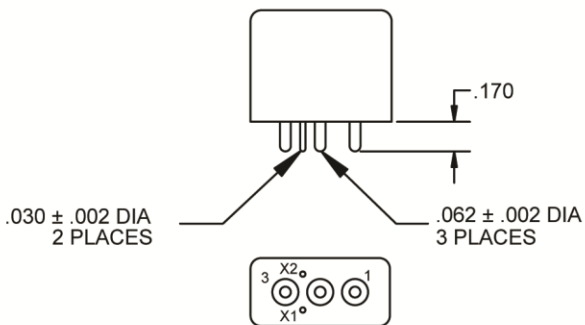


1 RELAY HEIGHT MAY BE INCREASED .100 INCH FOR "N" SUPPRESSED COILS

MOUNTING STYLE J

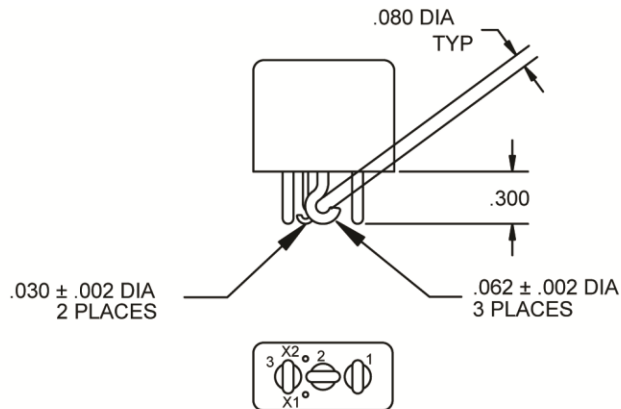
Dimensions in inches
Tolerances, unless otherwise specified, XX ± 0.03 in., XXX ± 0.010

TERMINAL TYPES



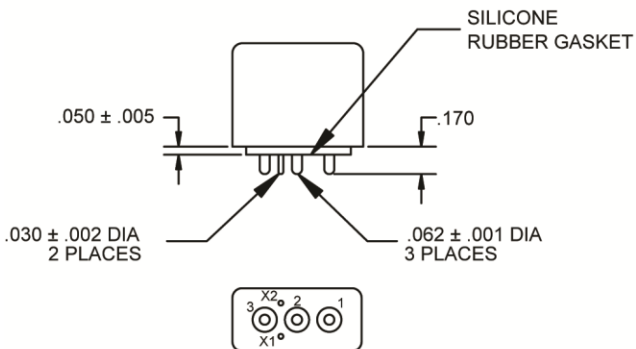
TERMINAL TYPE 1

FINISH:
BODY-LEACH BLUE
TERMINALS-TIN/LEAD



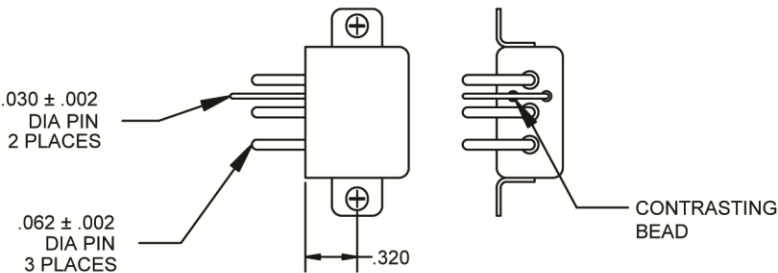
TERMINAL TYPE 2

FINISH:
BODY-LEACH BLUE
TERMINALS-TIN/LEAD



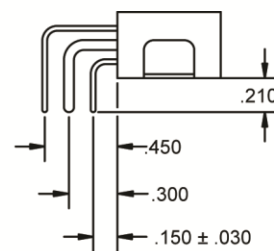
TERMINAL TYPE 4

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



TERMINAL TYPE 7

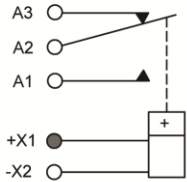
FINISH:
BODY - LEACH BLUE
TERMINALS - TIN/LEAD



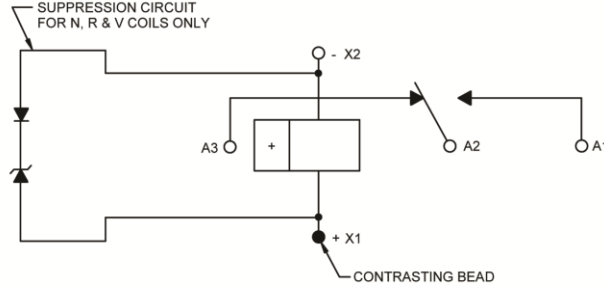
Dimensions in inches
Tolerances, unless otherwise specified, ± 0.03 in

DIAGRAMS

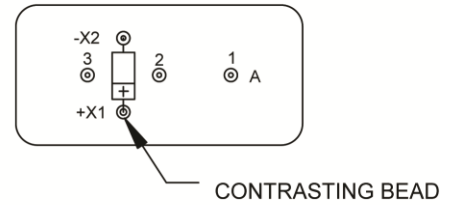
SCHEMATIC DIAGRAM



WIRING DIAGRAM

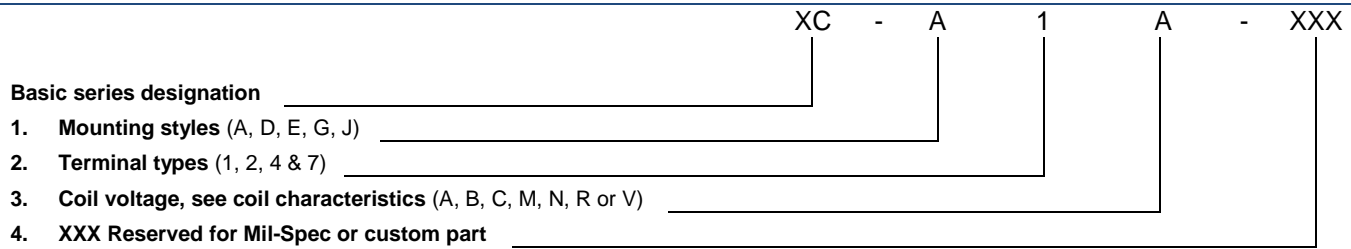


STANDARD TERMINAL LAYOUT



TOL: .XX ±.03; .XXX ±.010

NUMBERING SYSTEM



NOTES

- Standard Intermediate current test applicable, relay can also switch low level load 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 performed.
- 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.
- Applicable to Type "N", "R" & "V" coils only.
- Relay will not operate, but will not be damaged by application of reverse polarity on coil.

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