



- All welded construction

- Contact arrangement **3 PDT**

- Qualified to **MIL-PRF-6106**

Applicable sockets:

SO-1065-001
SM-1001-003

Application Notes:

001
002
103B
007
023

PRINCIPLE TECHNICAL CHARACTERISTICS

- **Contacts rated at** Low level, 28 Vdc and 115/200 Vac, 400 Hz, 3Ø, case grounded
- **Weight** 0.062 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	10	10	10
Inductive [2]	6	8	8
Motor	4	4	4
Lamp	2	2	-
Overload	30	60	60
Rupture	40	80	80
Low level [3]	-	-	-
Time current characteristics [4]	-	-	-

AMERICAS.

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<http://www.esterline.com/powersystems>

EUROPE.

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ASIA

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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% $\pm 20\%$	400	100	25	1275	400	100	25

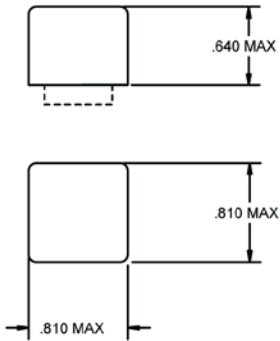
GENERAL CHARACTERISTICS

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	1250 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
- 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 (E mounting in track)	0.06 d.a. / 10 to 57 Hz 10G / 57 to 500 Hz
Sinusoidal vibration (G and 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 and D mounting	1G (0.4G ² /Hz, 50 to 2000 Hz)
- Test condition - E, J and G mounting (E in track)	1E (0.2G ² /Hz, 50 to 2000 Hz)
- Duration	15 minutes each plane
Shock (A and D mounting)	200G / 6 ms
Shock (E mounting in track)	50G / 11 ms
Shock (G and J 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]
Weight maximum	0.062 lbs.

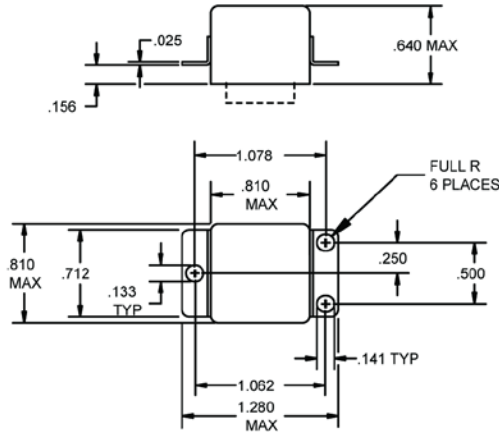
Unless otherwise noted, the specified temperature range applies to all relay characteristics.

Dimensions in inches
 Tolerances, unless otherwise specified
 .XX ± 0.03 in
 .XXX ± 0.10 in

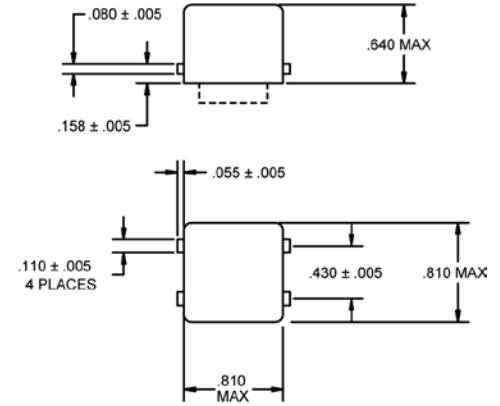
MOUNTING STYLES



MOUNTING STYLE A

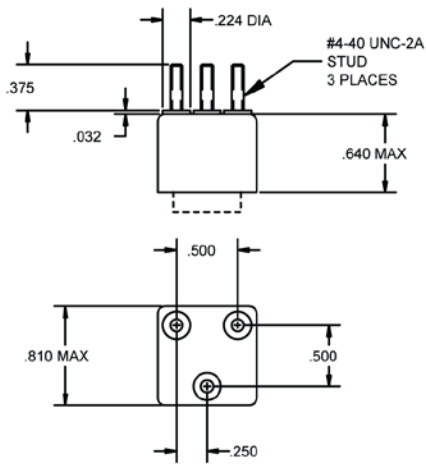


MOUNTING STYLE D

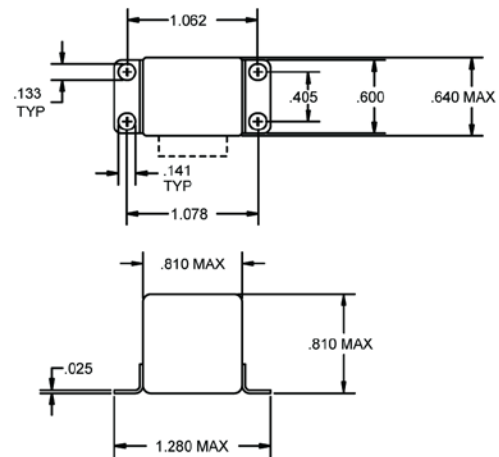


MOUNTING STYLE E

NOTE:
 FOR USE WITH TRACK MOUNT
 SYSTEM, MT-3000-003
 SM-1001-003
 SILICONE RUBBER GASKET NOT
 PROVIDED ON THIS MOUNTING
 STYLE.

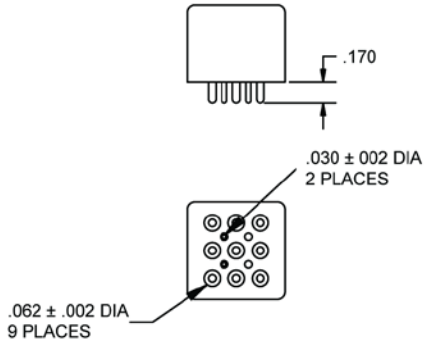


MOUNTING STYLE G



MOUNTING STYLE J

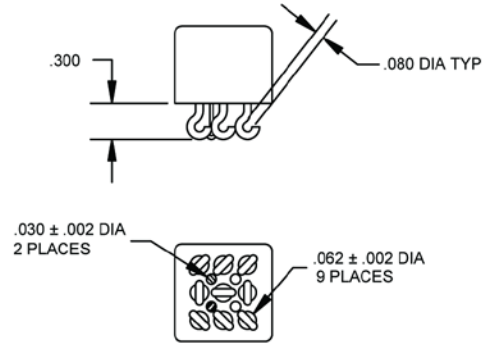
TERMINAL TYPES



TERMINAL TYPE 1

FINISH:
 BODY: TIN/LEAD (ALL M83536 QUALIFIED RELAYS)
 BLUE PAINT (UPON REQUEST)

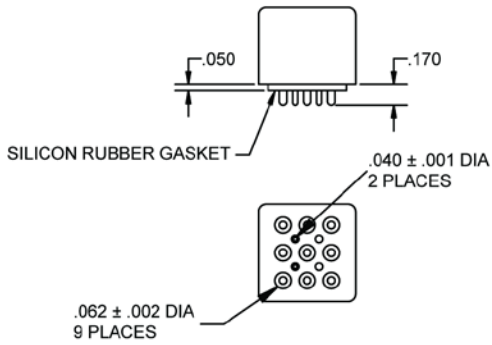
TERMINALS-TIN/LEAD



TERMINAL TYPE 2

FINISH:
 BODY: TIN/LEAD (ALL M83536 QUALIFIED RELAYS)
 BLUE PAINT (UPON REQUEST)

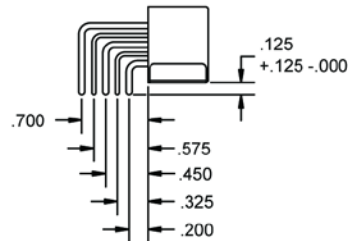
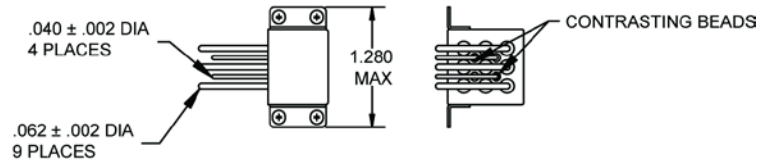
TERMINALS-TIN/LEAD



TERMINAL TYPE 4

FINISH:
 BODY: TIN/LEAD (ALL M83536 QUALIFIED RELAYS)
 BLUE PAINT (UPON REQUEST)

TERMINALS: GOLD PLATED



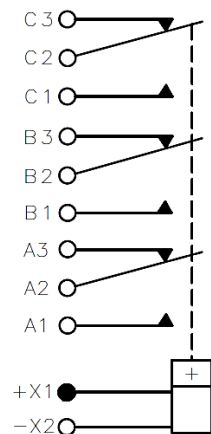
TERMINAL TYPE 7

FINISH:
 BODY: TIN/LEAD (ALL M83536 QUALIFIED RELAYS)
 BLUE PAINT (UPON REQUEST)

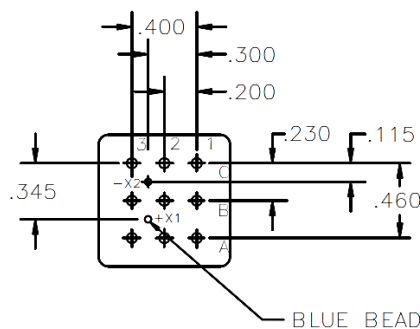
TERMINALS-TIN/LEAD

DIAGRAM(S)

SCHEMATIC DIAGRAM

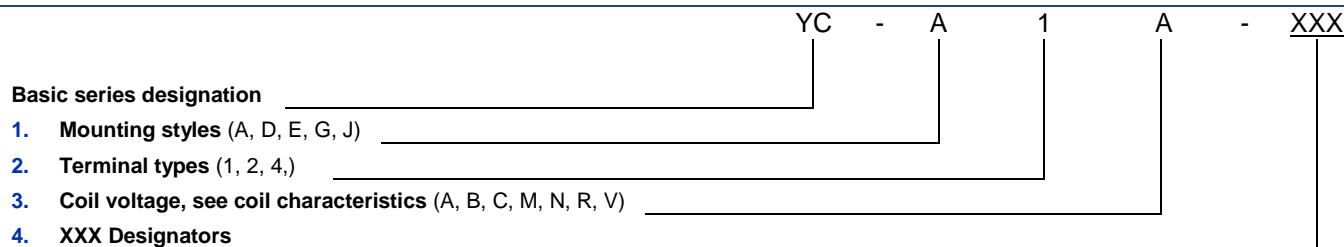


STANDARD TERMINAL LAYOUT



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, 10,000 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" coil have back EMF suppression to 42 volts maximum.
- 500 Vrms with silicone gasket compressed, all other conditions 250 Vrms coil to case, 350 Vrms all other points.
- Applicable to Type "N," "R" & "V" coils.
- Reference MIL-PRF-6106
- Relay will not operate, but will not be damaged by application of reverse polarity to coil.

For any inquiries, please contact your local Esterline Power Systems representative
<http://www.esterline.com/powersystems/Contact/TheAmericas.aspx>