



Applicable sockets:

SO-1065-001

SM-1001-003



Application Notes:

001
002
103B
007
023

• All welded construction

• Contact arrangement

3 PDT

• Qualified to

MIL-PRF-6106

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]	-	-	-

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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

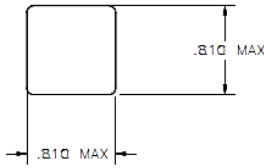
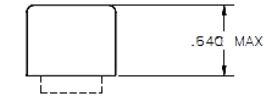
GENERAL CHARACTERISTICS

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	0.062lb

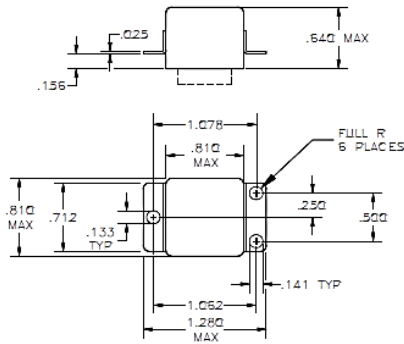
Unless otherwise noted, the specified temperature range applies to all relay characteristics.

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

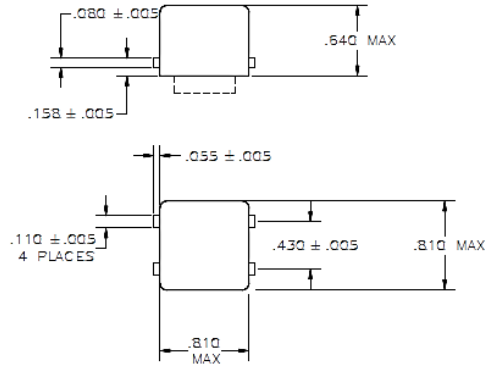
MOUNTING STYLES



MOUNTING STYLE A

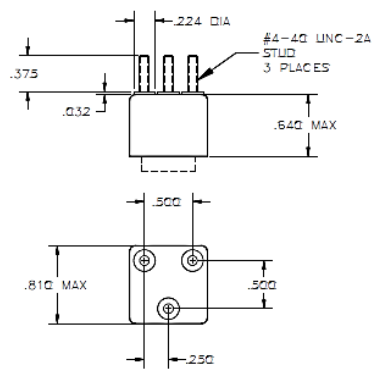


MOUNTING STYLE D

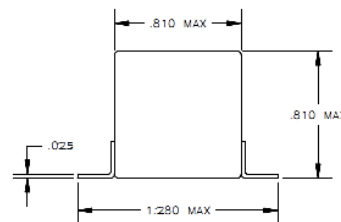
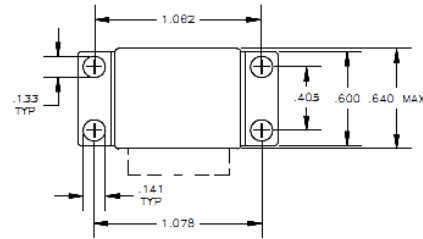


MOUNTING STYLE E

NOTE:
FOR USE WITH TRACK MOUNT
SYSTEM, MT-3000-.003 &
SM-1002-.003.
SILICONE RUBBER GASKET NOT
PROVIDED ON THIS MOUNTING
STYLE.

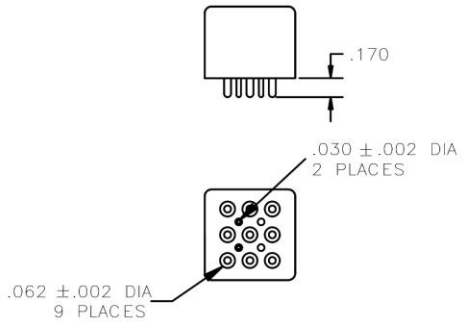


MOUNTING STYLE G



MOUNTING STYLE J

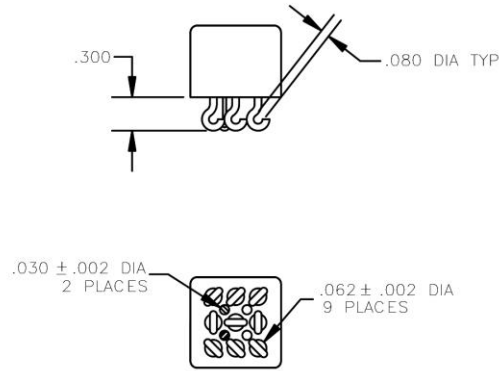
TERMINAL TYPES



TERMINAL TYPE 1

FINISH:
BODY: TIN/LEAD (all M83536 qualified relays)
BLUE PAINT (upon request)

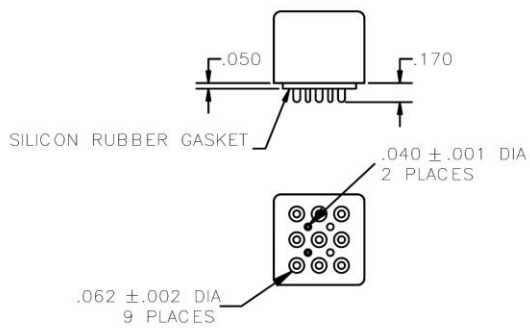
TERMINALS: TIN/LEAD



TERMINAL TYPE 2

FINISH:
BODY: TIN/LEAD (all M83536 qualified relays)
BLUE PAINT (upon request)

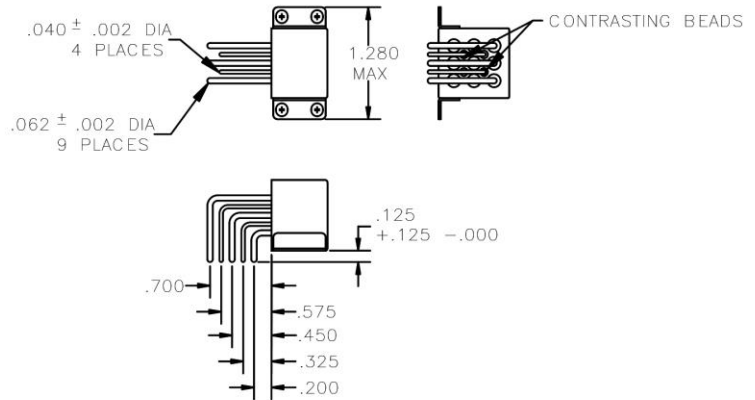
TERMINALS: TIN/LEAD



TERMINAL TYPE 4

FINISH:
BODY: TIN/LEAD (all M83536 qualified relays)
BLUE PAINT (upon request)

TERMINALS: TIN/LEAD



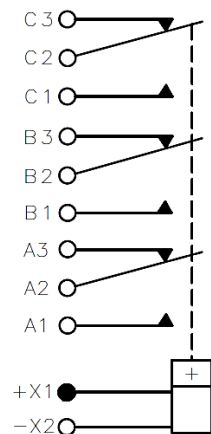
TERMINAL TYPE 7

FINISH:
BODY: TIN/LEAD (all M83536 qualified relays)
BLUE PAINT (upon request)

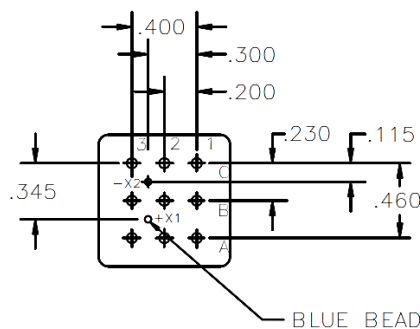
TERMINALS: TIN/LEAD

DIAGRAM(S)

SCHEMATIC DIAGRAM

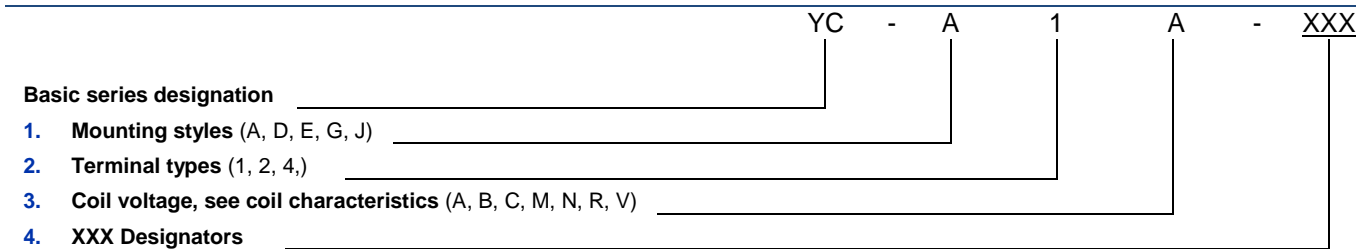


STANDARD TERMINAL LAYOUT



TOL: .XX ±.03; .XXX ±.010

NUMBERING SYSTEM



Example : YC-A1A-XXX

YC-A1A (Commercial)

YC-A1A-300 L,M (MIL)

YC-A1A-123 (Customer Part)

NOTES

1. Standard Intermediate current test applicable. Relay can also switch low level load while switching any of the other rated loads on adjacent contacts.
2. Inductive load life, 10,000 cycles.
3. Low level endurance test: contact load of 10 to 50 millivolt, 10 to 50 microamp, 100 Ohm max. contact resistance.
4. Refer to MIL-PRF-6106 for details.
5. "N," "R," & "V" coil have back EMF suppression to 42 volts maximum.
6. 500 Vrms with silicone gasket compressed, all other conditions 250 Vrms coil to case, 350 Vrms all other points.
7. Applicable to Type "N," "R" & "V" coils.
8. Reference MIL-PRF-6106
9. 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>