



Applicable sockets:  
SO-1063-9033/9034



Application Notes:

002  
007  
023

• All weld construction

• Contact arrangement

1 PDT

• Qualified to

MIL-PRF-83536/36

## PRINCIPLE TECHNICAL CHARACTERISTICS

• Contacts rated at	115 Vac 60Hz
• Weight	0.1 lbs. max
• Dimensions	1.01in x 0.51in x 1in
• 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
	115 Vac, 60 Hz, 1Ø (CASE GROUNDED)
Resistive	10
Inductive	10
Motor	8
Lamp	4
Overload	20
Rupture	N/A

### AMERICAS.

Tel: +1 714-736-7599  
<http://www.esterline.com/powersystems>

### EUROPE.

Tel: +33 3 87 97 31 01  
Fax: +33 3 87 97 96 86

### ASIA

Tel: +852 2 191 3830  
Fax: +852 2 389 5803

## COIL CHARACTERISTICS (Vdc/Vac)

CODE	A	B	C	M	N [5]	R [5]	V [5]
	(Vdc)	(Vdc)	(Vdc)	(Vdc)	(Vdc)	(Vdc)	(Vdc)
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 $\Omega$ $\pm$ 10% at +25° C or max coil current (AMPS) at +25° C	320 $\Omega$	80 $\Omega$	20 $\Omega$ +20% -10%	1000 $\Omega$	320 $\Omega$	80 $\Omega$	20 $\Omega$ +20% -10%

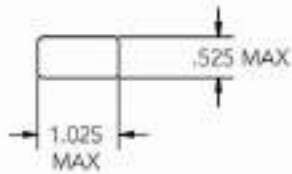
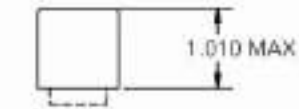
## GENERAL CHARACTERISTICS

Temperature range	-70°C to +125°C
Minimum operating cycles (life) at rated load	25,000
Minimum operating cycles (life) at 25% rated load	100,000
Dielectric strength at sea level	
- All circuits to ground and circuit to circuit	1250 Vrms
- Coil to ground and coil to coil	1000 Vrms
Dielectric strength at altitude 80,000 ft	500 Vrms [2]
Insulation resistance	
- Initial (500 Vdc)	100 M $\Omega$ min
- After environmental tests (500 Vdc)	50 M $\Omega$ min
Sinusoidal vibration (A, D and J mounting)	0.12 d.a. / 10 to 70 Hz 30G / 70 to 3000 Hz
Random vibration	
- Applicable specification	MIL-STD-202
- Method	214
- Test condition - A, D and J mounting	1G (0.4G <sup>2</sup> /Hz, 50 to 2000 Hz)
- Duration	15 minutes each plane
Shock (A, D and J mounting)	200G / 6 ms
Maximum contact opening time under vibration and shock	10 $\mu$ s
Operate time at nominal voltage - Series JS @ 25°C	10 ms max
Release time at nominal voltage - Series JS @ 25°C	10 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
Weight maximum	0.1lbs

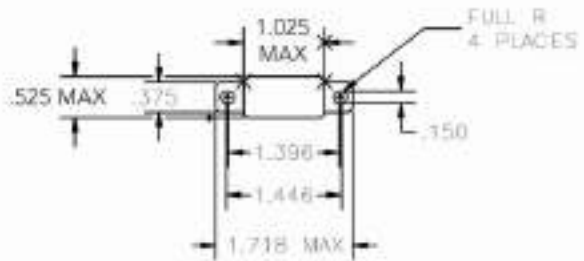
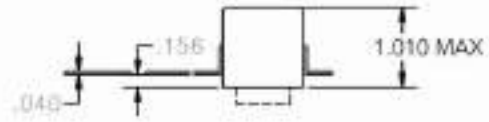
Unless otherwise noted, the specified temperature range applies to all relay characteristics.

Dimensions in inches  
Tolerances, unless otherwise specified,  $\pm 0.03$  in

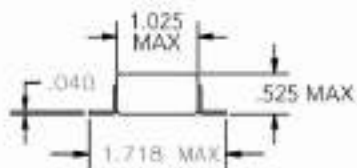
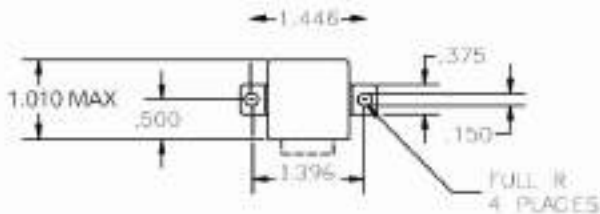
## MOUNTING STYLES



MOUNTING STYLE A

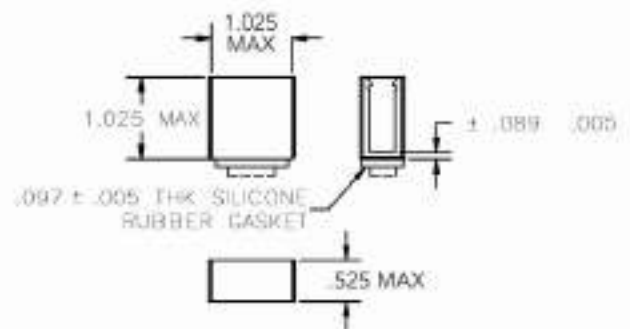


MOUNTING STYLE D



MOUNTING STYLE J

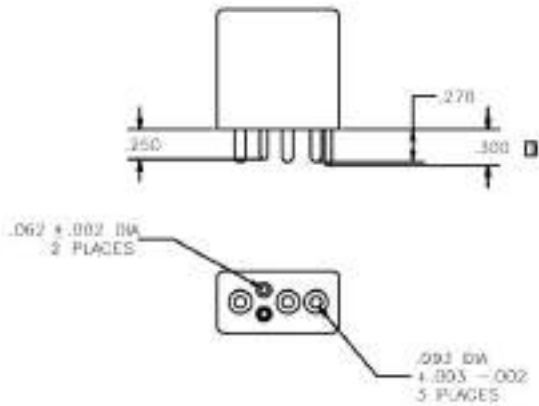
FOR USE WITH TRACK MOUNT SYSTEM. NOTE- TRACK SYSTEM NOT AVAILABLE FROM LEACH.



MOUNTING STYLE W

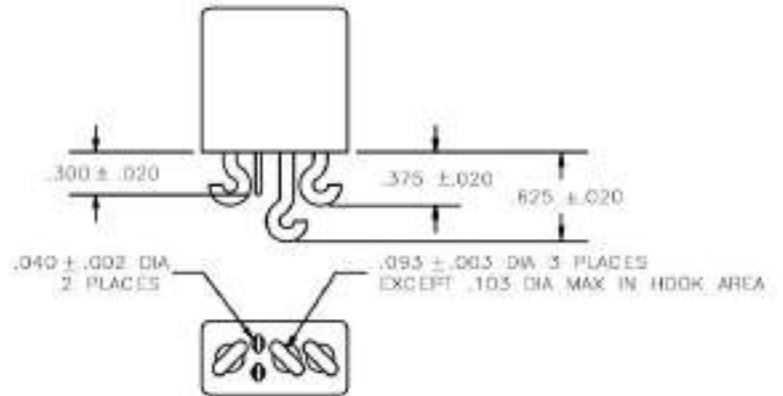
Dimensions in inches  
 Tolerances, unless otherwise specified, ± 0.03 in

**TERMINAL TYPES**

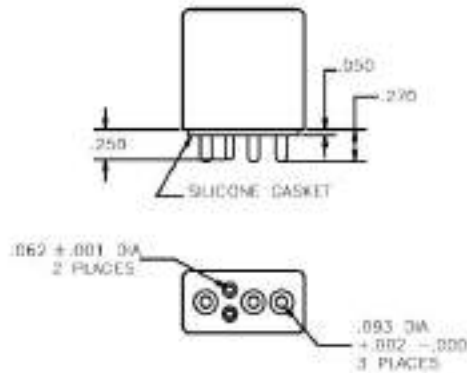


CONTACT: ROBISON ELECTRONICS, SAN LUIS OBISPO, CA. FOR INSULATOR PART NUMBER. *Not included with relay.*

**TERMINAL TYPE 1**  
 FINISH:  
 CASE—PAINTED LEACH BLUE  
 TERMINALS—TIN/LEAD



**TERMINAL TYPE 2**  
 FINISH:  
 CASE—PAINTED LEACH BLUE  
 TERMINALS—TIN/LEAD



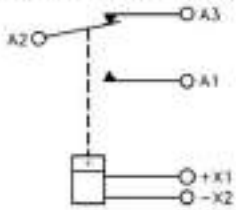
**TERMINAL TYPE 4**  
 FINISH:  
 CASE—TIN PLATE  
 PINS—GOLD PLATE

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

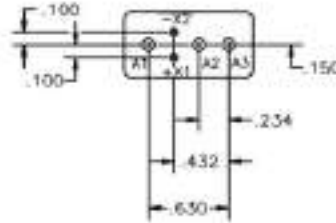
## DIAGRAMS

### SCHEMATIC DIAGRAM

COIL POLARITY NOT APPLICABLE TO DC VERSIONS

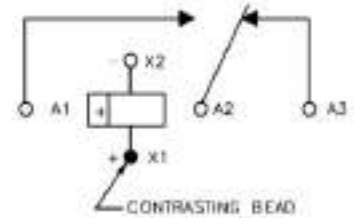


### STANDARD TERMINAL LAYOUT



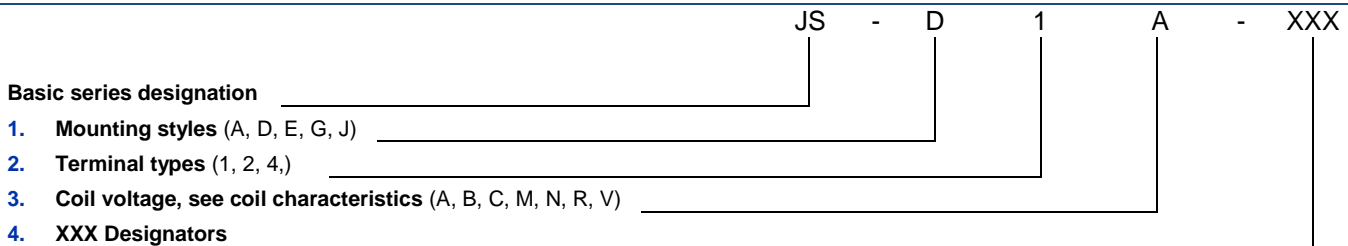
Bottom View

### WIRING DIAGRAM



STANDARD TOLERANCE: .xx= ±.010  
[1] COIL POLARITY NOT APPLICABLE TO AC VERSIONS.

## NUMBERING SYSTEM



Example : JS-D1A-XXX

JS-D1A (Commercial)

JS-D2A-300 L (MIL)

JS-D1A-123 (Customer Part)

## 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-83536/36
4. "N," "R" & "V" coils have back EMF suppression to 42 volts maximum.
5. 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>