



## Miniature 10 Amps • 2PDT Magnetic Latching To MIL-PRF-83536 DC Suppressed Coils

## SPECIFICATIONS

### GENERAL

**Contact Arrangement** ..... 2PDT (2 Form C)  
Magnetic Latching

**Weight** ..... 1.4 oz approx.  
Designed to meet the requirements of MIL-PRF-83536

### PERFORMANCE

#### Contact Rating (Note 1):

Resistive ..... 10 Amps @ 28 VDC or  
115/208V 400 Hz  
(Case Grounded)

Inductive ..... 8 Amps @ 28 VDC or  
115/208V 400 Hz  
4 Amps @ 115/208V 60 Hz

Motor ..... 4 Amps @ 28 VDC or  
(Case Grounded)  
115/208V 400 Hz  
3 Amps @ 115/208V 60 Hz  
(Case Grounded)

Lamp ..... 2 Amps @ 28 VDC or  
(Case Grounded)  
115/208V 400 Hz  
1.5 Amps @ 115/208V 60 Hz  
(Case Grounded)

**Life** ..... 100,000 operations minimum @ rated  
resistive load, 125°C

**Latch/Reset Power** ..... 500 mw approx.

**Latch/Reset Time:** **DC Coil**  
10 ms max  
Excluding bounce time at nominal coil voltage

**Contact Bounce Time** ..... 1 ms max  
@ rated contact load, 28 VDC

**Contact Voltage Drop:**  
Before Life ..... 100 mv max @ 10 Amps  
and 6 VDC  
After Life ..... 125 mv max @ 10 Amps  
and 6 VDC

### ENVIRONMENTAL

**Temperature Range** ..... -70°C to +125°C

**Vibration (Note 2)** ..... 0.12" DA 10 - 70 Hz  
30 G's 70 - 3,000 Hz

**Shock (Operating)(Note 2)** ..... 200 G's 6 ms

### ELECTRICAL CHARACTERISTICS

**Duty Cycle** ..... Continuous

**Insulation Resistance** ..... 100 megohms  
@ 500V 25°C

#### Dielectric Strength:

Sea Level:  
Contact to Case ..... 1,250 VRMS  
Contact to Coil ..... 1,250 VRMS  
Coil to Case ..... 1,000 VRMS  
Across Open Contacts ..... 1,250 VRMS  
80,000 Feet:  
All Points ..... 350 VRMS

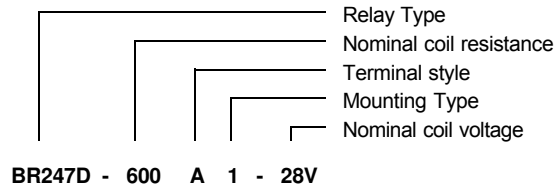
### MIL-PRF-83536/13 QUALIFIED to ER level L

#### Notes

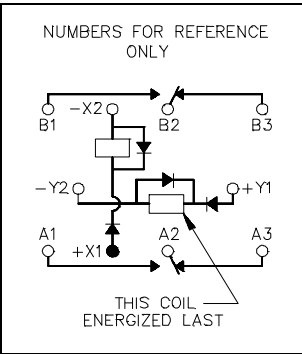
- For other ratings consult the factory.
- For applications requiring higher shock and vibration, consult the factory.
- AC coil line frequency 50 to 400 Hz.

## COIL DATA

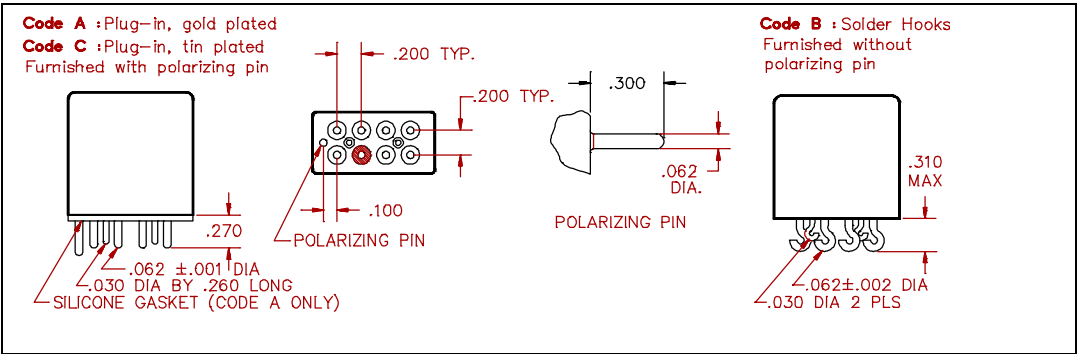
MODEL BR247D PART NUMBER	BR247D-38() <sup>( )</sup> -6V	BR247D-150() <sup>( )</sup> -12V	BR247D-600() <sup>( )</sup> -28V	BR247D-1550() <sup>( )</sup> -48V
NOMINAL COIL VOLTAGE	6 VDC	12 VDC	28 VDC	48 VDC
MAXIMUM COIL VOLTAGE	8 VDC	15 VDC	29 VDC	59 VDC
LATCH/RESET VOLTAGE (MAX @ +125°C)	4.5 VDC	9 VDC	18 VDC	36 VDC
LATCH/RESET VOLTAGE (MAX)	3 VDC	6 VDC	13 VDC	24 VDC
MAXIMUM BACK EMF	3 VDC	3 VDC	3 VDC	3 VDC
COIL RESISTANCE ± 10% @ 25°C	38 OHMS	150 OHMS	600 OHMS	1550 OHMS



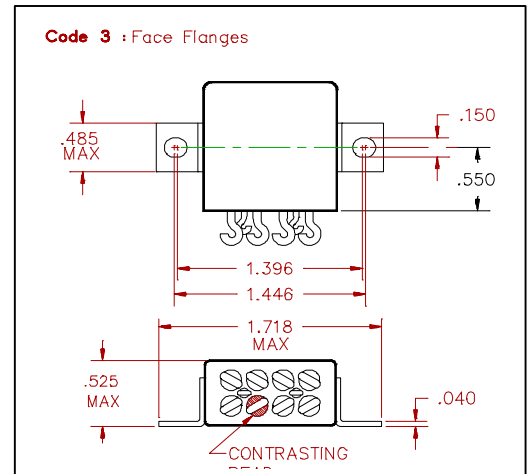
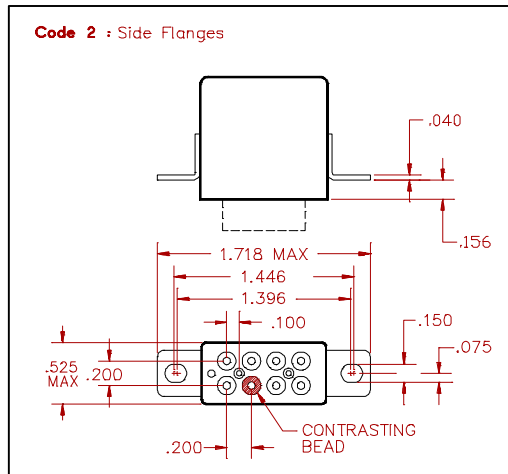
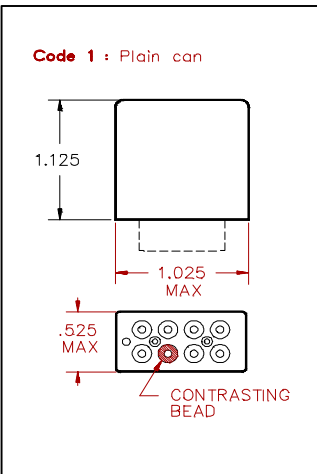
## SCHEMATIC TERMINAL VIEW



## TERMINAL STYLES



## MOUNTING CODES



## GENERAL NOTES

- Unless otherwise specified, all tests made at nominal coil voltages, @ 25°C.
- For special coil variations, switching configurations, terminals styles and mounting types, consult the factory.
- Unless otherwise specified, tolerances on decimal dimensions are ± .010".
- Specifications contained herein are subject to change without notice.



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