

## Miniature 10 Amps • 4PDT Magnetic Latching To MIL-PRF-83536

### SPECIFICATIONS

#### GENERAL

|                                  |  |
|----------------------------------|--|
| <b>Contact Arrangement</b> ..... | 4PDT (4 Form C)<br>Magnetic Latching                                 |
| <b>Weight</b> .....              | 2.2 oz approx.<br>Designed to meet the requirements of MIL-PRF-83536 |

#### PERFORMANCE

##### Contact Rating (Note 1):

|                 |  |
|-----------------|--|
| Resistive ..... | 10 Amps @ 28 VDC or<br>115/208V 400 Hz<br>(Case Grounded)  |
| Inductive ..... | 8 Amps @ 28 VDC or<br>115/208V 400 Hz<br>(Case Grounded)<br>2.5 Amps @ 115/208V 60 Hz<br>(Case Grounded) |
| Motor .....     | 4 Amps 28 VDC or<br>115/208V 400 Hz<br>(Case Grounded)<br>2 Amps @ 115/208V 60 Hz<br>(Case Grounded)     |
| Lamp .....      | 2 Amps @ 28 VDC or<br>115/208V 400 Hz<br>(Case Grounded)<br>1.5 Amps @ 115/208V 60 Hz<br>(Case Grounded) |

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

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

**Latch/Reset Time:**  
DC Coil 15 ms max AC Coil 50 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 ..... 150 mv max @ 10 Amps  
and 6 VDC  
After Life ..... 175 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

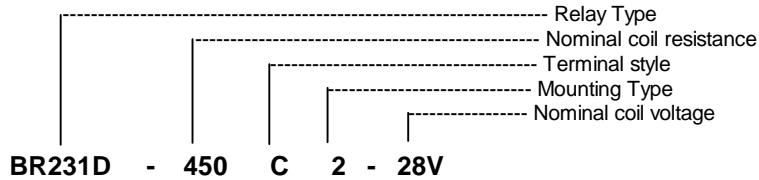
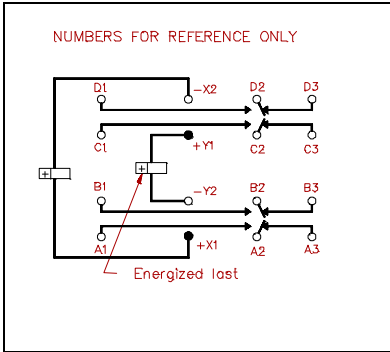
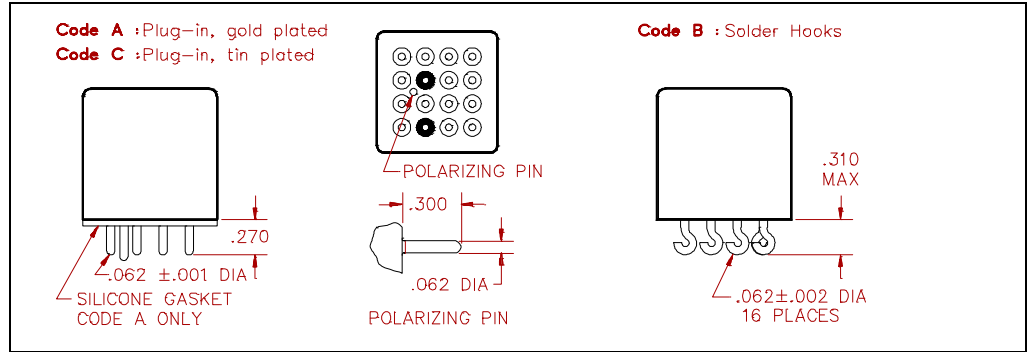
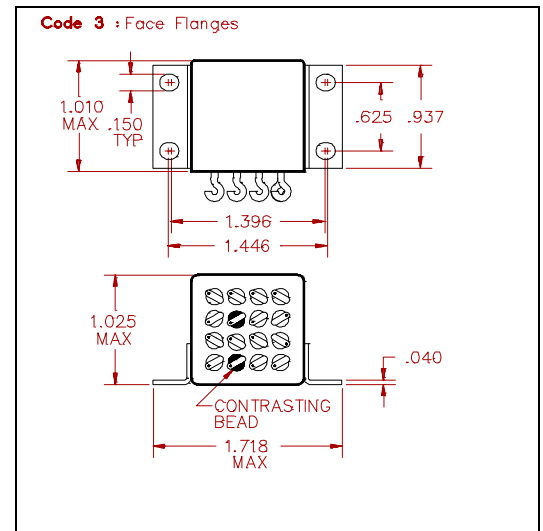
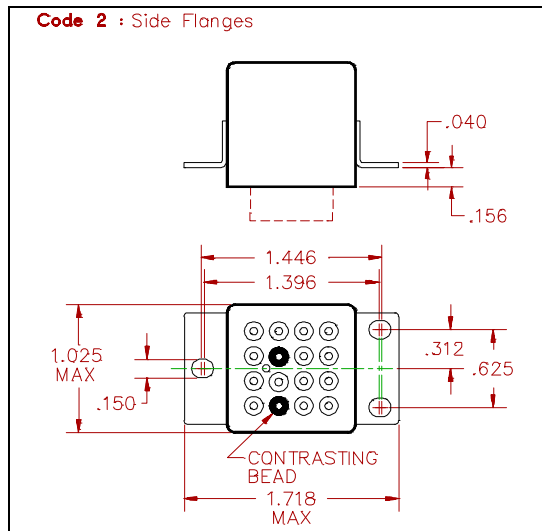
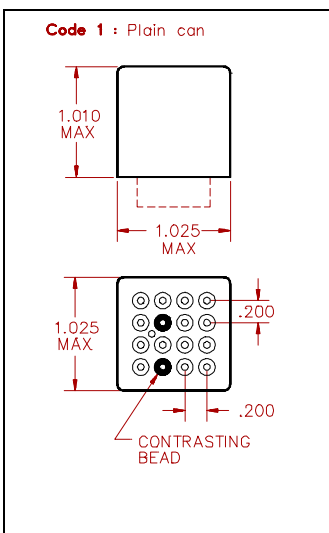
### MIL-PRF-83536/18 QUALIFIED to ER level L

#### 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 BR231 PART NUMBER            | BR231-28(0)-6V | BR231-112(0)-12V | BR231-450(0)-28V | BR231-1500(0)-48V | BR231AC-(0)-115V<br>(Note 3) |
|------------------------------------|----------------|------------------|------------------|-------------------|------------------------------|
| NOMINAL COIL VOLTAGE               | 6 VDC          | 12 VDC           | 28 VDC           | 48 VDC            | 115 VAC                      |
| MAXIMUM COIL VOLTAGE               | 8 VDC          | 15 VDC           | 29 VDC           | 59 VDC            | 122 VAC                      |
| LATCH/RESET VOLTAGE (MAX @ +125°C) | 4.5 VDC        | 9 VDC            | 18 VDC           | 36 VDC            | 90 VAC                       |
| LATCH/RESET VOLTAGE (MAX)          | 3 VDC          | 6 VDC            | 13 VDC           | 24 VDC            | 72 VAC                       |
| COIL RESISTANCE ± 10% @ 25°C       | 28 OHMS        | 112 OHMS         | 450 OHMS         | 1500 OHMS         | I = 0.04 AMPS                |


**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.