

**Miniature  
10 Amps • 4PDT  
Magnetic Latching  
To MIL-PRF-83536  
DC Suppressed Coils**

**SPECIFICATIONS**

**GENERAL**

**Contact Arrangement** ..... 4PDT (4 Form C)  
Magnetic Latching

**Weight**.....2.2 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  
(Case Grounded)  
2.5 Amps @ 115/208V 60 Hz  
(Case Grounded)

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

Lamp ..... 2 Amps @ 28 VDC or  
115/208V 400 Hz  
(Case Grounded)  
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**  
15 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

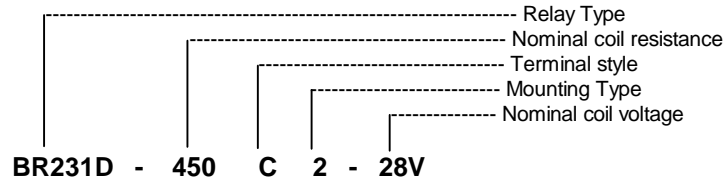
**MIL-PRF-83536/19 QUALIFIED to ER level L**

Notes:

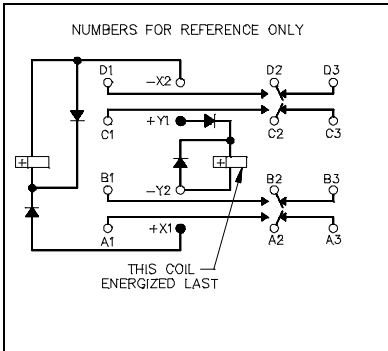
1. For other ratings consult the factory.
2. For applications requiring higher shock and vibration, consult the factory.
3. AC coil line frequency 50 to 400 Hz.

## COIL DATA:

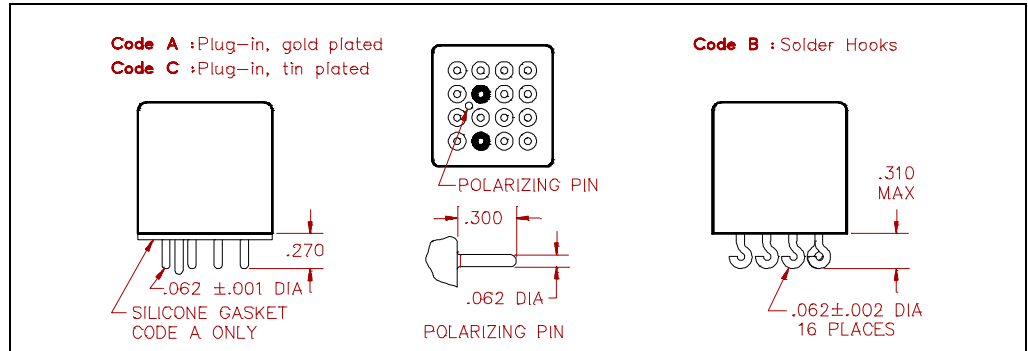
MODEL BR231D PART NUMBER	BR231D-28() <sup>(1)</sup> -6V	BR231D-112() <sup>(1)</sup> -12V	BR231D-450() <sup>(1)</sup> -28V	BR231D-1500() <sup>(1)</sup> -48V
NOMINAL COIL VOLTAGE	6 VDC	12 VDC	28 VDC	48 VDC
MAXIMUM COIL VOLTAGE	8 VDC	15 VDC	29 VDC	59 VDC
LATCH/RESET VOLTAGE (MAX @ +125°C)	4.5 VDC	9 VDC	18 VDC	36 VDC
LATCH/RESET VOLTAGE (MAX)	3 VDC	6 VDC	13 VDC	24 VDC
MAXIMUM BACK EMF	9 VDC	3 VDC	3 VDC	3 VDC
COIL RESISTANCE ± 10% @ 25°C	28 OHMS	112 OHMS	450 OHMS	1500 OHMS



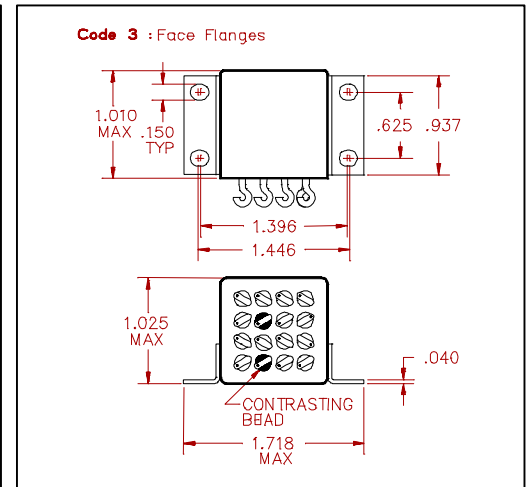
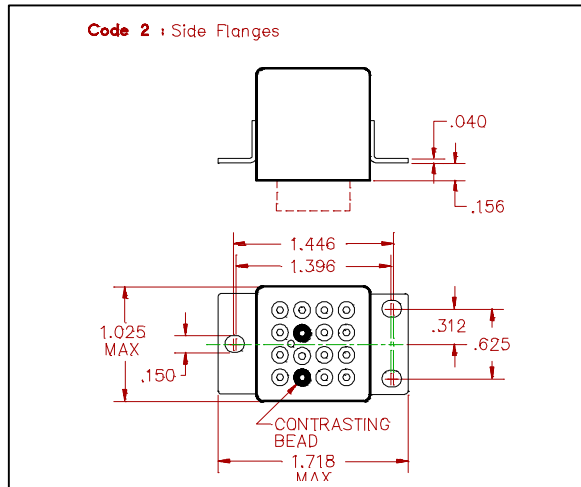
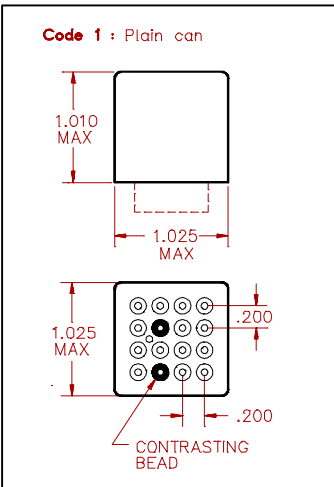
## SCHEMATIC TERMINAL VIEW



## 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.