

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

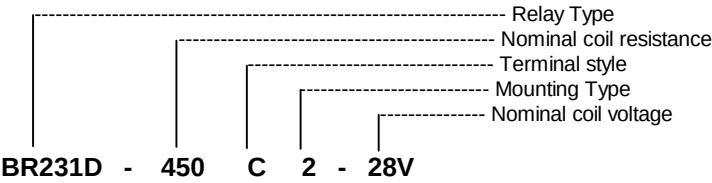
MIL-PRF-83536/19 QUALIFIED to ER level L

Notes:

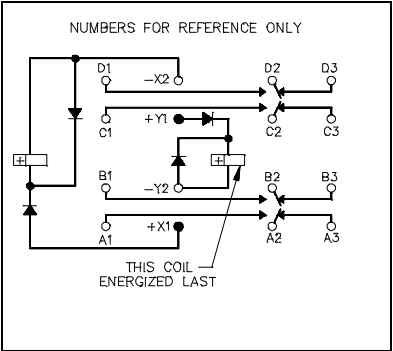
- For other ratings consult the factory.
- For applications requiring higher shock and vibration, consult the factory.
- AC coil line frequency 50 to 400 Hz.

COIL DATA:

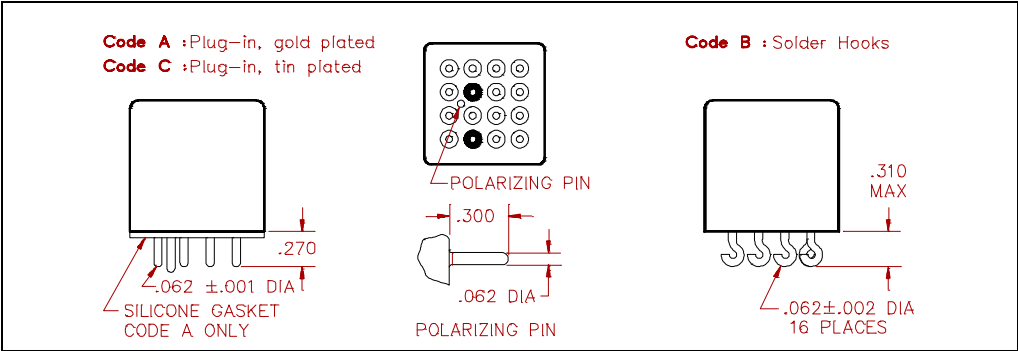
MODEL BR231D PART NUMBER	BR231D-28(0)-6V	BR231D-112(0)-12V	BR231D-450(0)-28V	BR231D-1500(0)-48V
NOMINAL COIL VOLTAGE	6 VDC	12 VDC	28 VDC	48 VDC
MAXIMUM COIL VOLTAGE	8 VDC	15 VDC	29 VDC	59 VDC
LATCH/RESET VOLTAGE (MAX @ +125°C)	4.5 VDC	9 VDC	18 VDC	36 VDC
LATCH/RESET VOLTAGE (MAX)	3 VDC	6 VDC	13 VDC	24 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



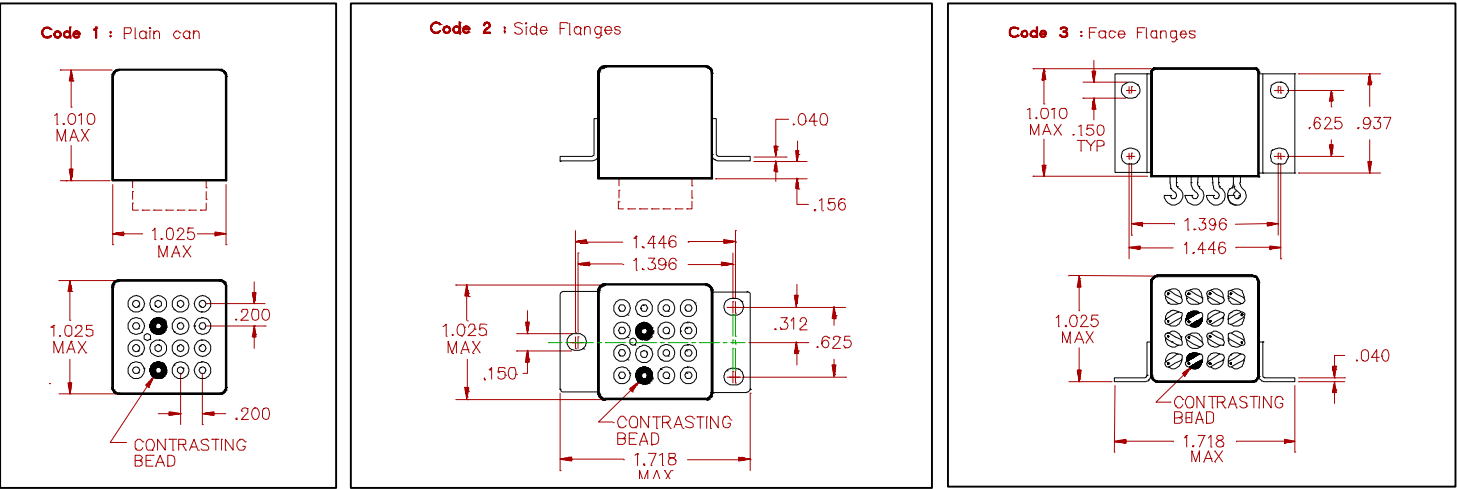
SCHEMATIC
TERMINAL VIEW



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.

Mouser Electronics

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[BR231D-450A2-28V-008L](#) [BR231D-450B2-28V-007L](#)