

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.

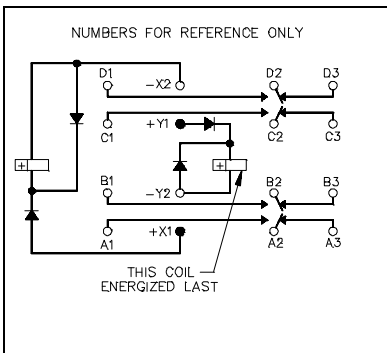
COIL DATA

MODEL BR231D PART NUMBER	BR231D-28(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 $\pm 10\%$ @ 25°C	28 OHMS	112 OHMS	450 OHMS	1500 OHMS

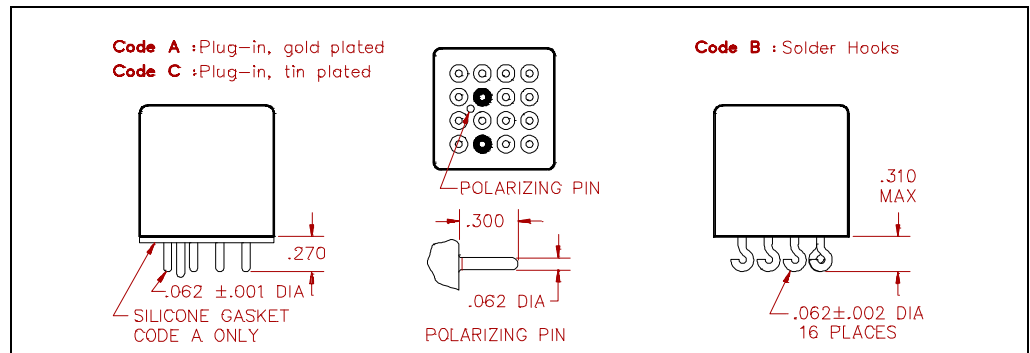
----- Relay Type
 ----- Nominal coil resistance
 ----- Terminal style
 ----- Mounting Type
 ----- Nominal coil voltage

BR231D - 450 C 2 - 28V

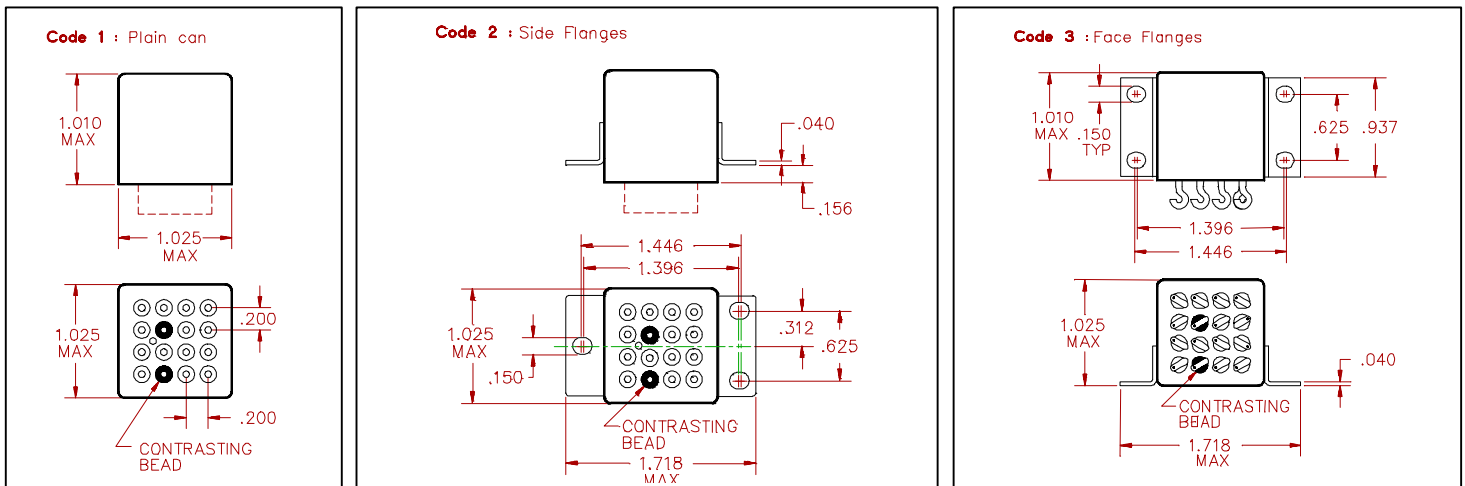
SCHEMATIC TERMINAL VIEW



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 $\pm .010"$.
- Specifications contained herein are subject to change without notice.



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