

BR235D

Miniature, 25 Amps, 3PDT, To MIL-PRF-83536,
DC Suppressed Coils



General

- Contact Arrangement
 - 3PDT (3 Form C)
- Weight
 - 3.0 oz approx.
 - Designed to meet the requirements of MIL-PRF-83536

Performance

Contact Rating (Note 1):

- Resistive
 - 25 Amps @ 28 VDC or 115/208V 400 Hz (Case Grounded)
- Inductive
 - 15 Amps @ 115/208V 400 Hz
 - 12 Amps @ 28 VDC
 - (Case Grounded)
- Motor
 - 10 Amps @ 28 VDC or 115/208V 400 Hz (Case Grounded)
- Lamp
 - 5 Amps @ 28 VDC or 115/208V 400 Hz (Case Grounded)
- Life
 - 50,000 operations minimum @ rated resistive load, 125°C
- Pull In Power
 - 500 mw approx

Operate/Release 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 @ 25 Amps and 6 VDC
- After Life
 - 175 mv max @ 25 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

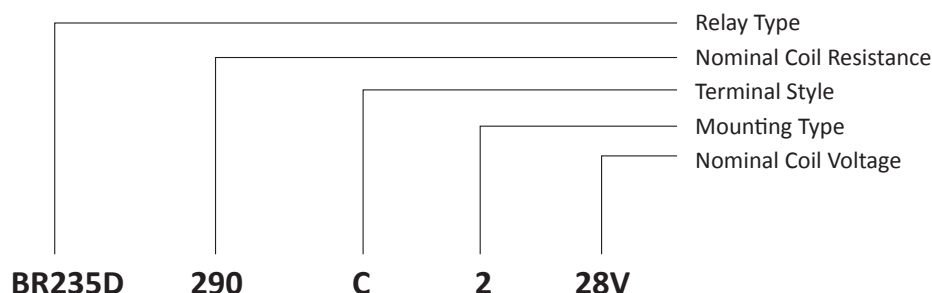
Notes:

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

BABCOCK

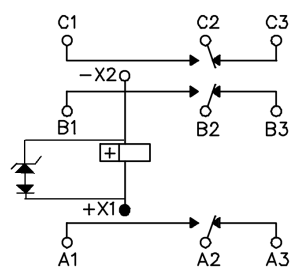
Coil Data:

Model Part Number	BR235D-20() -6V	BR235D-78() -12V	BR235D-290() -28V	BR235-890() -48V
Nominal Coil Voltage	6 VDC	12 VDC	28 VDC	48 VDC
Maximum Coil Voltage	8 VDC	15 VDC	29 VDC	59 VDC
Pull In Voltage (Max @ +125°C)	4.5 VDC	9 VDC	18 VDC	36 VDC
Drop Out Voltage (Max)	1.8 VDC	3.5 VDC	5.1 VDC	11 VDC
Maximum Back EMF	9 VDC	18 VDC	42 VDC	72 VDC
Coil Resistance $\pm 10\%$ @ 25°C	20 OHMS	78 OHMS	290 OHMS	890 OHMS



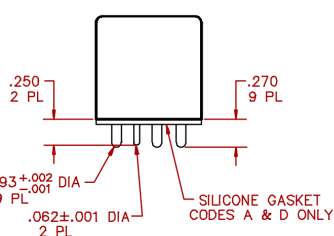
Schematic

Terminal View

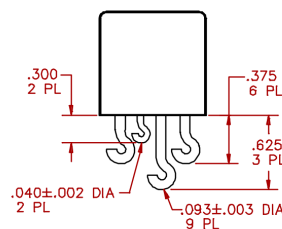


Terminal Styles

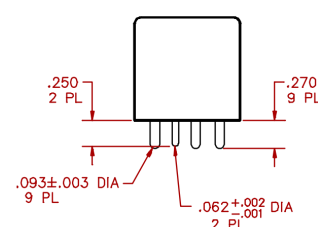
Code A : Plug-in, gold plated



Code B : Solder Hooks

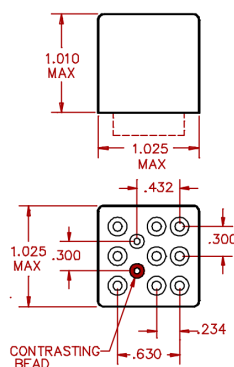


Code C : Plug-in, tin plated

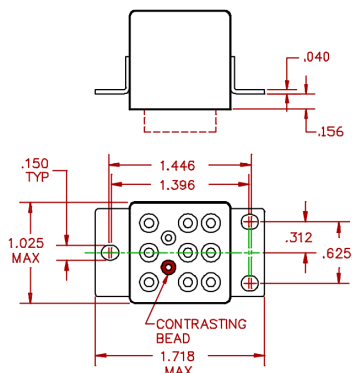


Mounting Codes

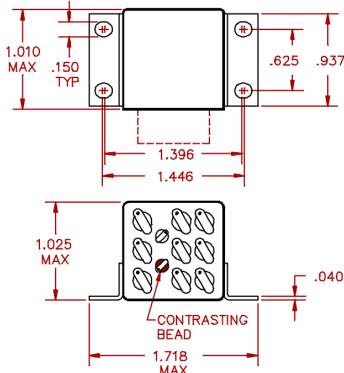
Code 1 : Plain can



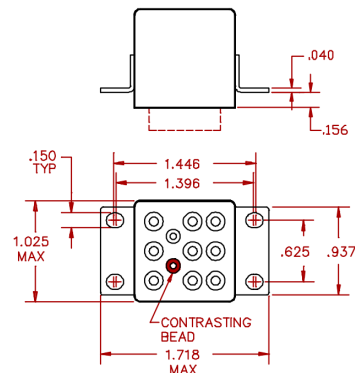
Code 2 : Side Flanges



Code 3 : Face Flanges



Code 4 : Side Flanges



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