

## Miniature 10 Amps • 2PDT To MIL-PRF-83536 DC Suppressed Coils

## SPECIFICATIONS

### GENERAL

**Contact Arrangement**..... 2PDT (2 Form C)  
**Weight**..... 1.6 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  
 2.5 Amps @ 115/208V 60 Hz  
 (Case Grounded)  
 Motor..... 4 Amps @ 28 VDC or  
 115/208V 400 Hz  
 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

**Pull In Power**..... 500 mw approx.

**Operate/Release 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 ..... 100 mv max @ 10 Amps  
 and 6 VDC  
 After Life ..... 125 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

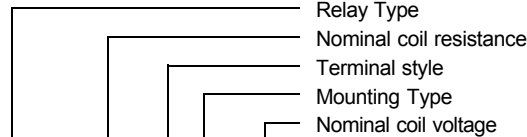
### MIL-PRF-83536/10 QUALIFIED to ER level M

#### 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.

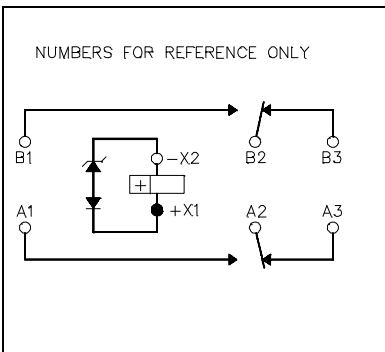
## COIL DATA

| MODEL BR246D PART NUMBER          | BR246D-2000-6V | BR246D-8000-12V | BR246D-32000-28V | BR246D-100000-48V |
|-----------------------------------|----------------|-----------------|------------------|-------------------|
| 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        | 80 OHMS         | 320 OHMS         | 1000 OHMS         |

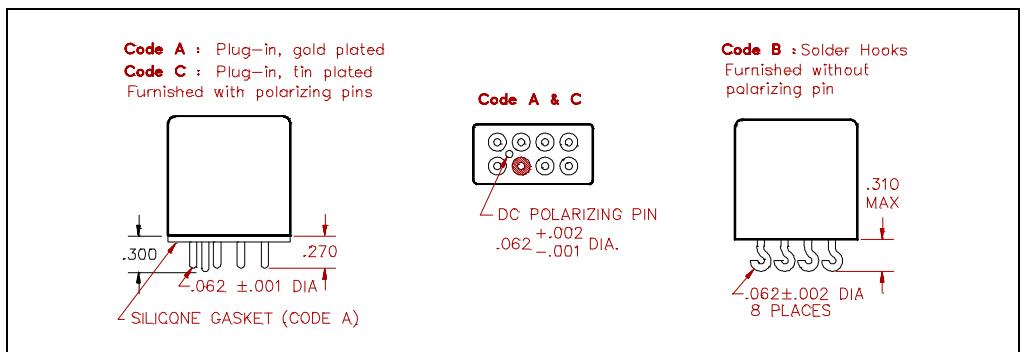


BR246D - 320 C 2 - 28V

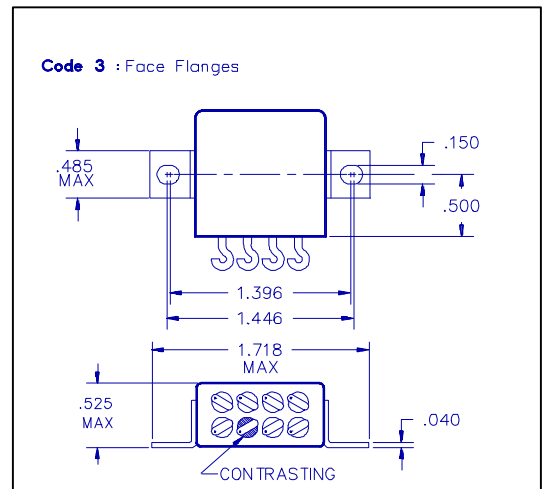
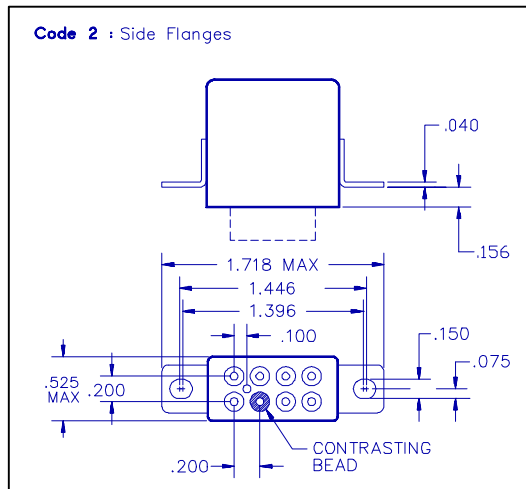
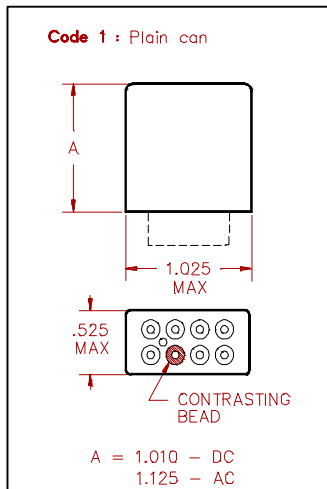
## SCHEMATIC TERMINAL VIEW



## 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.



**Microsemi Corporate Headquarters**  
One Enterprise, Aliso Viejo,  
CA 92656 USA

**Within the USA:** +1 (800) 713-4113  
**Outside the USA:** +1 (949) 380-6100  
**Sales:** +1 (949) 380-6136  
**Fax:** +1 (949) 215-4996

**E-mail:** [sales.support@microsemi.com](mailto:sales.support@microsemi.com)

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