



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

## 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  
 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**      **AC Coil**  
   15 ms max   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 ..... 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

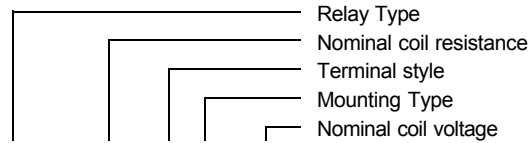
### MIL-PRF-83536/9 QUALIFIED to ER level M

#### 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.

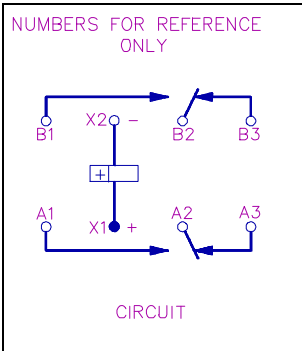
## COIL DATA

MODEL BR246 PART NUMBER	BR246-20()()-6V	BR246-80()()-12V	BR246-320()()-28V	BR246-1000()()-48V	BR246AC-()()-115V (Note 3)
NOMINAL COIL VOLTAGE	6 VDC	12 VDC	28 VDC	48 VDC	115 VAC
MAXIMUM COIL VOLTAGE	8 VDC	15 VDC	29 VDC	59 VDC	122 VAC
PULL IN VOLTAGE (MAX @ +125°C)	4.5 VDC	9 VDC	18 VDC	36 VDC	90 VAC
DROP OUT VOLTAGE (MAX)	1.8 VDC	3.5 VDC	5.1 VDC	11 VDC	5 - 30 VAC
COIL RESISTANCE ± 10% @ 25°C	20 OHMS	80 OHMS	320 OHMS	1000 OHMS	I = 0.04 AMPS

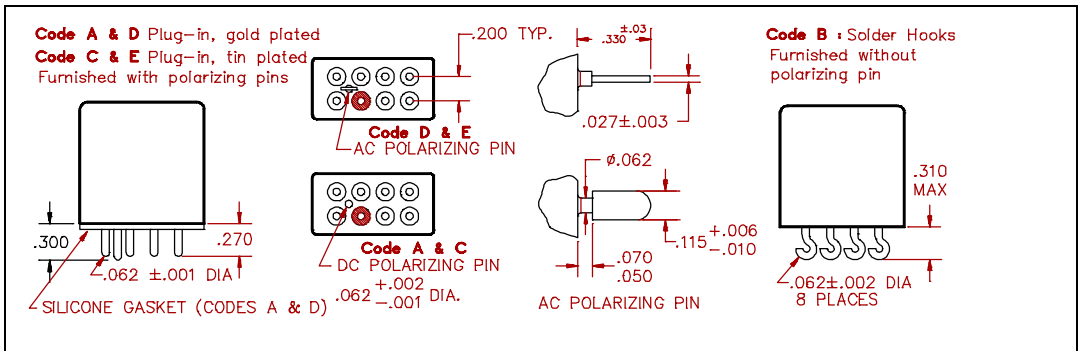


BR246 - 320 C 2 - 28V

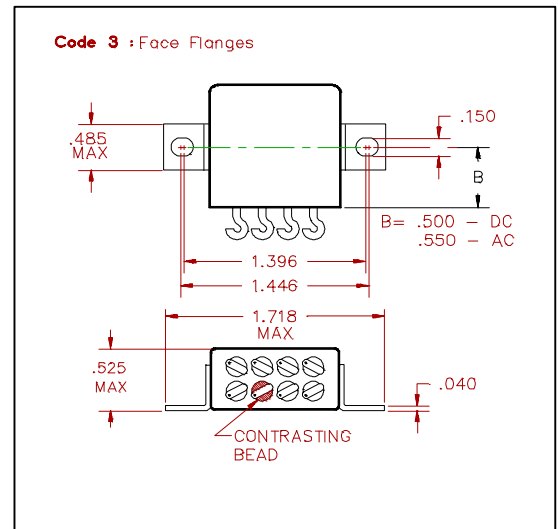
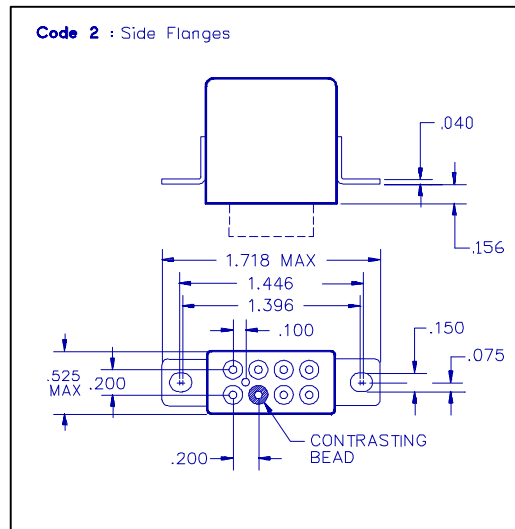
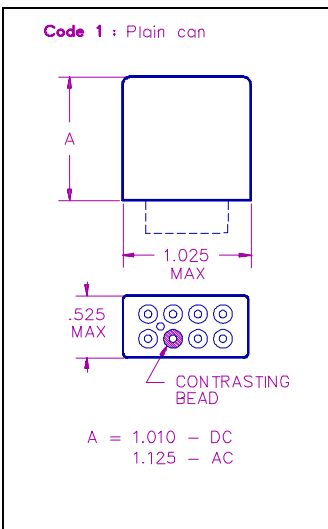
## SCHEMATIC TERMINAL VIEW



## 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 ± .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)

© 2015 Microsemi Corporation. All rights reserved. Microsemi and the Microsemi logo are trademarks of Microsemi Corporation. All other trademarks and service marks are the property of their respective owners.

Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for communications, defense & security, aerospace and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; security technologies and scalable anti-tamper products; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, Calif., and has approximately 3,400 employees globally. Learn more at [www.microsemi.com](http://www.microsemi.com).

Microsemi makes no warranty, representation, or guarantee regarding the information contained herein or the suitability of its products and services for any particular purpose, nor does Microsemi assume any liability whatsoever arising out of the application or use of any product or circuit. The products sold hereunder and any other products sold by Microsemi have been subject to limited testing and should not be used in conjunction with mission-critical equipment or applications. Any performance specifications are believed to be reliable but are not verified, and Buyer must conduct and complete all performance and other testing of the products, alone and together with, or installed in, any end-products. Buyer shall not rely on any data and performance specifications or parameters provided by Microsemi. It is the Buyer's responsibility to independently determine suitability of any products and to test and verify the same. The information provided by Microsemi hereunder is provided "as is, where is" and with all faults, and the entire risk associated with such information is entirely with the Buyer. Microsemi does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other IP rights, whether with regard to such information itself or anything described by such information. Information provided in this document is proprietary to Microsemi, and Microsemi reserves the right to make any changes to the information in this document or to any products and services at any time without notice.