



Miniature 10 Amps • 2PDT To MIL-R-83536

SPECIFICATIONS

GENERAL

Contact Arrangement 2PDT (2 Form C)
Weight 1.6 oz approx.
 Designed to meet the requirements of MIL-R-6106

PERFORMANCE

Contact Rating (Note 1):

Resistive 10 Amps @ 28 VDC or
 115/208V 400 Hz
 (Case Grounded)
 Inductive 6 Amps @ 115/208V 400 Hz
 (Case Grounded)
 4 Amps @ 115/208V 60 Hz
 (Case Grounded)
 Motor 4 Amps @ 28 VDC or
 115/208V 400 Hz
 (Case Grounded)
 3 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** **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 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-R-83536/9 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.

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

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

BR246 - 320 C 2 - 28V

NUMBERS FOR REFERENCE ONLY

CIRCUIT

Code A & D Plug-in, gold plated
Code C & E Plug-in, tin plated
 Furnished with polarizing pins

Code D & E
 AC POLARIZING PIN

Code A & C
 DC POLARIZING PIN

Code B : Solder Hooks
 Furnished without polarizing pin

Technical drawings showing dimensions for the three connector types:

- Code A & D:** Dimensions include .300, .270, .062 ± .001 DIA, and .062 ± .002 DIA. Material: SILICONE GASKET (CODES A & D).
- Code C & E:** Dimensions include .200 TYP., .330 ± .03, .027 ± .003, .062, .070, .050, .115, +.006, -.010. Material: AC POLARIZING PIN.
- Code B:** Dimensions include .310 MAX, .062 ± .002 DIA, and 8 PLACES. Material: Solder Hooks.

Code 1 : Plain can

Diagram illustrating the dimensions of a plain can:

- Height: A
- Width: 1.025 MAX
- Bottom flange thickness: .525 MAX
- Feature: CONTRASTING BEAD (indicated by a callout line pointing to a bead on the bottom flange)

Dimensions for Code 1:

- A = 1.010 - DC
- 1.125 - AC

Code 2 : Side Flanges

Technical drawing showing the dimensions for Code 2 Side Flanges. The drawing includes a top view and a side view. Key dimensions are:

- Top View Dimensions:
 - Overall width: 1.718 MAX
 - Distance from center to side flange: 1.446
 - Distance from center to side flange (inner): 1.396
 - Distance from center to side flange (outer): .100
 - Distance from center to side flange (inner): .100
- Side View Dimensions:
 - Overall height: .156
 - Distance from center to side flange: .150
 - Distance from center to side flange (inner): .075
- Other Dimensions:
 - Distance from center to side flange (inner): .525 MAX
 - Distance from center to side flange (inner): .200
 - Distance from center to side flange (inner): .200
- Labels:
 - CONTRASTING BEAD

Code 3 : Face Flanges

Technical drawing showing the dimensions for Face Flanges. The drawing includes a top view and a side view.

Top View Dimensions:

- Overall width: .485 MAX
- Hole diameter: .150
- Distance from hole center to flange edge: B
- Formula for B: $B = .500 - \frac{DC}{550 - AC}$
- Distance from hole center to hole center: 1.396
- Distance from hole center to flange edge: 1.446
- Overall distance from hole center to hole center: 1.718 MAX

Side View Dimensions:

- Flange thickness: .525 MAX
- Central hole diameter: .040
- Feature: CONTRASTING BEAD

- 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.