



Patent: ZL 2010 2 0563191.X



### Contact Rating

- Nominal Load(Resistive Load Cos  $\phi = 1$ )  
Contact Capacity  
BRF-D.....17A at 250VAC  
BRF-DM/DB.....17A at 250VAC  
20A at 125VAC
- Max. Allowable Current  
BRF-D.....17A  
BRF-DM/DB.....20A
- Max. Allowable Voltage  
BRF-D.....AC250V  
BRF-DM/DB.....AC250V
- Max. Allowable Power Force  
BRF-D.....4250VA  
BRF-DM/DB.....4250VA
- Contact Material.....Ag Alloy
- Contact Form.....SPST&SPDT

### Performance (at Initial Value)

- Contact Resistance..... $\leq 50m\Omega$  at 6VDC/1A
- Operate Time.....10ms. Max
- Release Time.....5ms. Max
- Dielectric Strength:  
Between Coil & Contact.....2,800VAC at 50/60 Hz  
for one minute  
Between Contacts.....1,000VAC at 50/60 Hz  
for one minute
- Surge Resistance.....10,000V (between Coil  
& Contact 1.2x50  $\mu s$ )

## ISO9001、ISO14001 Certification Enterprises

### Main Feature

1. Small size (21x16x20.8in mm) produces a switching capacity up to 20A for high density P.C.Board mounting technique.
2. The contact form construction is 1A/1B/1C
3. The Surge Resistance of BRF series is 10,000V
4. Sealing Construction (Free from dust and solder flux):  
BRF-SS: Plastic Sealed Type.
5. The selection of plastic insulation material is designed for high temperature and provides better chemical solution performance.
6. RoHS Compliant.

### Application

Air Conditioning, Fridge, Washing Machine, etc Household Appliances

- Insulation Resistance.....1,000 Mega  $\Omega$  Min. at  
500VDC
- Max. On/Off Switching:  
Electrical.....30 Ops per minute  
Mechanical.....300 Ops per minute
- Temperature Range.....-40~85°C
- Humidity Range.....5%~85% RH
- Coil Temperature Rise.....35°C Maximum
- Vibration:  
Endurance.....10 to 55 Hz dual  
amplitude width 1.5mm  
Error Operation.....10 to 55 Hz dual  
amplitude width 1.5mm
- Shock:  
Endurance.....981m/s<sup>2</sup> Min  
Error Operation.....98.1m/s<sup>2</sup> Min
- Life Expectancy:  
Electrical.....10<sup>5</sup> Operations at  
Rated Resistive  
load  
Mechanical.....10<sup>7</sup> Operations at  
No load condition
- Weight.....about 14g

### Safety Standard & Its File Number

- UL.....E356168
- TUV.....R50208738
- CQC.....Pending

## Coil Specification (at 20 °C)

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega \pm 8\%$ )	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum Allowable Voltage (VDC)
BRF-D/DM/DB	3	120	25	Abt. 0.36	75% Maximum	10% Minimum	130%
	5	72	69.4				
	6	60	100				
	9	40	225				
	12	30	400				
	24	15	1600				
	48	7.5	6400				

## Ordering Information

**BRF - SS - 1 12 D M**

**Contact Form:** Nil:One form C  
M:One form A  
B:One form B

**Coil Type:** D:Standard DC Coil

**Coil Voltage:** 03:3V, 05:5V, 06:6V, 09:9V  
12:12V, 24:24V, 48:48V

**Number of Pole:** 1:One Pole

**Type of Sealing:** SS:Plastic Sealed Type

**Type:** BRF

## Classification

Model	BRF		
Coil Sensitivity	Standard DC Coil		
	1A	1B	1C
Flow Solder Type	BRF-SS-1□□DM	BRF-SS-1□□DB	BRF-SS-1□□D

## Dimension

