



Patent: ZL 2010 2 0563196.2



**Main Feature**

1. Small size (29x12.9x15.6 in mm) produces a switching capacity up to 12A for high density P.C.Board mounting technique.
2. The contact form construction is 1A/1B/1C
3. The Surge Resistance of BRT1 series is 10,000V
4. Sealing Construction (Free from dust and solder flux):  
BRT1-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

**Contact Rating**

- Nominal Load(Resistive Load Cos  $\phi = 1$ )  
Contact Capacity  
BRT1-L/D/LM/DM.....12A at 250VAC
- Max. Allowable Current  
BRT1-L/D/LM/DM.....12A
- Max. Allowable Voltage  
BRT1-L/D/LM/DM.....AC250V
- Max. Allowable Power Force  
BRT1-L/D/LM/DM.....3,000VA
- Contact Material..... Ag Alloy
- Contact Form..... SPDT & SPST

**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.....5,000VAC 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  $\mu s$ )
- 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 $^{\circ}C$
- Humidity Range.....5%~85% RH
- Coil Temperature Rise..... 35 $^{\circ}C$  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 13g

**Safety Standard & Its File Number**

- UL.....E333244
- TUV.....R50209295
- CQC.....CQC10002042508

## 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)
BRT1-D BRT1-DM	5	80.6	62	Abt. 0.4	75% Maximum	10% Minimum	130%
	6	66.7	90				
	9	44.6	202				
	12	33.3	360				
	24	16.7	1440				
BRT1-L BRT1-LM	5	50	100	Abt. 0.25	75% Maximum	10% Minimum	130%
	6	41.7	144				
	9	27.7	325				
	12	20.8	576				
	24	10.4	2304				
	48	5.2	9216				

## Ordering Information

**BRT1 - 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  
L: High Sensitivity 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:** BRT1

## Classification

Model	BRT1			
Coil Sensitivity	Standard DC Coil		High Sensitivity DC Coil	
	1C	1A	1C	1A
Plastic Sealed Type	BRT1-SS-1□□D	BRT1-SS-1□□DM	BRT1-SS-1□□L	BRT1-SS-1□□LM

## Dimension

