



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 μs)
- Insulation Resistance.....1,000 Mega Ω 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/s² Min
Error Operation.....98.1m/s² Min
- Life Expectancy:
Electrical.....10⁵ Operations at
Rated Resistive
load
Mechanical.....10⁷ 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

