



Patent: ZL 2011 2 0054564.5

Patent: ZL 2011 2 0054582.3



## ISO9001、ISO14001 Certification Enterprises

### Main Feature

1. Small size (24x10x25 in mm) produces a switching capacity up to 10A for high density P.C.Board mounting technique.
2. The contact form construction is 1A
3. The Surge Resistance of BSA1 series is 10,000V
4. Sealing Construction (Free from dust and solder flux):  
BSA1-S: Plastic duct cover.
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  
BSA1-DM.....10A at 250VAC  
  10A at 30VDC  
BSA1-LM.....5A at 250VAC  
  5A at 30VDC
- Max. Allowable Current  
BSA1-DM.....10A  
BSA1-LM.....5A
- Max. Allowable Voltage  
BSA1-DM/LM.....AC250V DC30V
- Max. Allowable Power Force  
BSA1-DM.....2,500VA 300W  
BSA1-LM.....1,250VA 150W
- Contact Material..... Ag Alloy
- Contact Form..... 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.....4,500VAC 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 11g

### Safety Standard & Its File Number

- UL.....E332719
- CQC.....CQC10002052523

## 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)
BSA1-DM	5	108.7	46	Abt. 0.54	75% Maximum	10% Minimum	130%
	6	89.6	67				
	9	60	150				
	12	44.4	270				
	24	21.8	1100				
	48	11.2	4270				
BSA1-LM	5	50	100	Abt. 0.25	75% Maximum	10% Minimum	130%
	6	41.7	144				
	9	27.8	324				
	12	20.7	580				
	24	10.4	2300				
	48	5.2	9216				

## Ordering Information

<b>BSA1</b>	<b>-</b>	<b>SS</b>	<b>-</b>	<b>1</b>	<b>12</b>	<b>D</b>	<b>M</b>	
								<b>Contact Form: M:One form A</b>
								<b>Coil Type: D: Standard DC Coil L: High Sensitivity DC Coil</b>
								<b>Coil Voltage: 03:3V, 05:5V, 06:6V, 09:9V 12:12V, 24:24V, 48:48V</b>
								<b>Number of Pole: 1:One Pole</b>
								<b>Type of Sealing: S:Plastic duct cover</b>
								<b>Type: BSA1</b>

## Classification

Model	BSA1	
Coil Sensitivity	Standard DC Coil	High Sensitivity DC Coil
	1A	1A
Flow Solder Type	BSA1 -S-1□□DM	BSA1-S-1□□LM

## Dimension

