



Patent: ZL 2010 2 0563194.3



### Contact Rating

- Nominal Load(Resistive Load Cos  $\phi = 1$ )  
Contact Capacity  
BPM1-L/LM.....10A at 250VAC  
10A at 30VDC
- Max. Allowable Current  
BPM1-L/LM.....10A
- Max. Allowable Voltage  
BPM1-L/LM..... AC250V DC30V
- Max. Allowable Power Force  
BPM1-L/LM.....2,500VA 300W
- 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

### Main Feature

1. Small size (29.2x12.8x20.4 in mm) produces a switching capacity up to 10A for high density P.C.Board mounting technique.
2. The contact form construction is 1A/1B/1C
3. The Surge Resistance of BPM1 series is 10,000V
4. Sealing Construction (Free from dust and solder flux):  
BPM1-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

- 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.....E332719
- TUV.....R50170592
- CQC.....CQC10001046678

#### 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)
BPM1-L BPM1-LM	3	176.5	17	Abt. 0.54	75% Maximum	10% Minimum	130%
	5	108.7	46				
	6	89.6	67				
	9	60	150				
	12	44.4	270				
	24	21.8	1100				
	48	11.2	4270				

#### Ordering Information

**BPM1 - SS - 1 12 L M**

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

**Coil Type:** L: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:** BPM1

#### Classification

Model	BPM1	
Coil Sensitivity	Standard DC Coil	
Plastic Sealed Type	1C	1A
	BPM1 -SS-1□□L	BPM1 -SS-1□□LM

#### Dimension

