



Patent: ZL201720598987.0 ZL 2020212920636  
ZL201820795065.3



### Contact Rating

- Nominal Load(Resistive Load Cos  $\phi = 1$ )  
Contact Capacity  
BJ-DM/LM.....10A at 125VAC  
5A at 250 VAC  
5A at 30 VDC  
TV-5 at 125VAC  
BJ-DMF/LMF.....10A at 250VAC  
10A at 30 VDC  
TV-5 at 125VAC  
400W at 125VAC
- Max. Allowable Current  
BJ-DM/LM/DMF/LMF.....10A
- Max Allowable Voltage.....AC250V. DC30V
- Max Allowable Power Force  
BJ-DM/LM.....1250VA 150W  
BJ-DMF/LMF.....2500VA 300W
- Contact Material.....Ag Alloy
- Contact Form.....SPST-NO

### Performance (at Initial Value)

- Contact Resistance..... $\leq 100m\Omega$  at 6VDC/1A
- Operate Time.....8 ms. Max.
- Release Time.....5 ms. Max
- Dielectric Strength:  
Between Coil & Contact.....4000VAC at 50/60  
Hz for one minute  
Between Contacts.....1000VAC at 50/60  
Hz for one minute
- Surge Resistance.....10,000V (between  
Coil & contact  
1.2x50  $\mu s$ )

### Main Feature

1. Small size(18.3x10.2x15.2 in mm) produces a Switching capacity up to 10A for high density P.C.Board mounting technique.
2. The Contact form construction is 1A (SPST-NO)
3. The Surge Resistance of BJ Series is 10,000V.
4. Sealing Construction (Free from dust and solder flux): BJ-SS:Flux-proof type.
5. The selection of plastic insulation material is designed for high temperature and provides better chemical solution performance.
6. RoHS Compliant.
7. Meet the requirements of Tuv 61810 for reinforced insulation
8. It can provide IEC60079 series products
9. UL insulation class F

### Application

Domestic Appliances. Office Machines. Audio Equipment. Car Use.....etc

- Insulation Resistance..... 1,000 Mega  $\Omega$  Min.  
at 500VDC
- Max. On/Off Switching:  
Electrical..... 6 Ops per minute  
Mectrical.....300 Ops per minute
- Temperature Range..... - 40~105 $^{\circ}C$
- 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:  
Mechanical.....10<sup>7</sup> Operations at  
No load condition  
Electrical.....10<sup>5</sup>Operations at  
Rated Resistive  
load
- Weight.....about 7 g

### Safety Standard & Its File Number

- UL.....E333244
- TUV.....R50183595  
AK50493052
- CQC.....CQC10002054547

## Coil Specification (at 20 °C)

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega \pm 10\%$ )	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum voltage (VDC)
BJ-DM BJ-DMF	3	150	20	Abt. 0.45	75% Maximum	10% Minimum	130%
	5	91	55				
	6	75	80				
	9	50	180				
	12	37.5	320				
	24	18.8	1,280				
BJ-LM BJ-LMF	3	67	45	Abt. 0.2	75% Maximum	10% Minimum	130%
	5	40	125				
	6	33.3	180				
	9	22.5	400				
	12	16.7	720				
	24	8.3	2,880				

remarks: Maximum voltage refers to the relay coil in a short period of time can withstand the maximum voltage value

## Ordering Information

<b>BJ</b>	-	<b>SS</b>	-	<b>1</b>	<b>12</b>	<b>D</b>	<b>M</b>	<b>F</b>	F:contact load 10A
									<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: SS:Flux-proof type</b>
									<b>Type: BJ</b>

remarks:

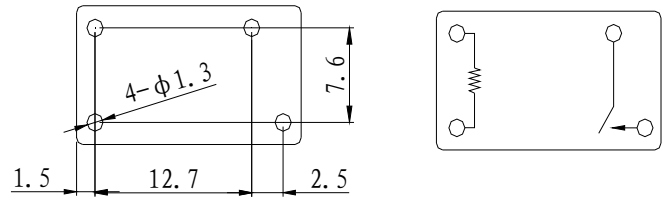
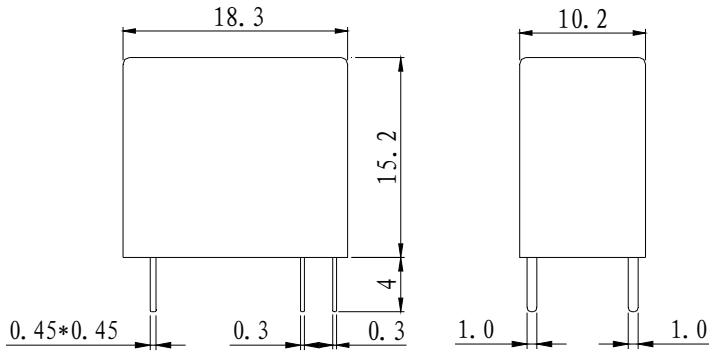
(1)When using in clean environment (without H<sub>2</sub>S SO<sub>2</sub> NO<sub>2</sub> dust and other pollutants),it is recommended to Use flux resistant products.

When using in polluted environment(with a certain amount of H<sub>2</sub>S SO<sub>2</sub> NO<sub>2</sub> dust and other pollutants),it is recommended to use plastic encapsulated products,please confirm in actual use.

(2)For the products that need to meet the explosion-proof requirements of iec60079 series,please note Ex in the Model and specification when placing an order. Our company will print Ex mark on the product shell to distinguish Them Because not all products of specifications have explosion-proof certification,please contact us when Necessary to determine the appropriate products.

Model	BJ			
Coil Sensitivity	Standard DC Coil		High Sensitivity DC Coil	
Plastic Sealed Type	BJ-SS-1□□DM	BJ-SS-1□□DMF	BJ-SS-1□□LM	BJ-SS-1□□LMF

**Dimension**



Dimension Tolerance: < 1mm:  $\pm 0.2$ mm  
1—5mm:  $\pm 0.3$ mm  
> 5mm:  $\pm 0.5$ mm

**DISCLAIMER:**

This product specification is for reference only and subject to change without prior notice.

For AFE, it is not possible to assess all performance requirements for relays in each specific application area and therefore the customer should select a suitable product for each specific application, please contact AFE for additional technical support. But the responsibility of product selection is only the responsibility of the customer.