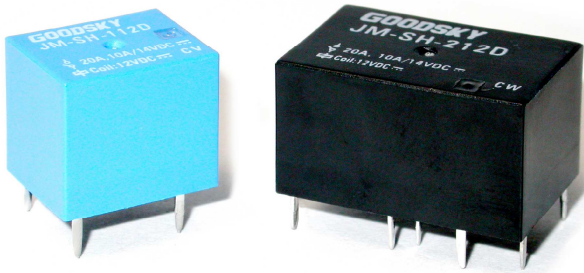


Main Feature



1. Smaller size with the capability of 25A inrush current.
2. Applicable for automotive electrical systems.
3. Distinctive twin relay structure on JM-2 providing high performance for the use of automotive.
4. Resistance to environment with shock and vibration.
5. Comply with RoHS, REACH and ELV regulations

Contact Rating

| Load Type | JM-1P (DM/LM) | JM-1P (D/L) | JM-2P (DM/LM) | JM-2P (D/L) |
|--|---------------|-------------|---------------|-------------|
| Rated Load (Resistive) | 10A 14VDC | 10A 14VDC | 10A 14VDC | 10A 14VDC |
| Rated Load (Motor) at 0.5s ON, 9.5s OFF | 20A 14VDC | 20A 14VDC | 20A 14VDC | 20A 14VDC |
| Rated Carrying Current | 10A | 10A | 10A | 10A |
| Max. Allowable Voltage | 60VDC | 60VDC | 60VDC | 60VDC |
| Max. Allowable Current | 25A | 25A | 25A | 25A |
| Max. Allowable Power Force | 280W | 280W | 280W | 280W |
| Contact Material | Ag Alloy | Ag Alloy | Ag Alloy | Ag Alloy |
| Contact Form | SPST | SPDT | DPST | DPDT |

Application

Power Window Control, Auto Door Lock Control, Power Mirror Control, Seat Adjustment, Wiper Control

Performance (at Initial Value)

- Contact Resistance 100 mΩ Max. @1A,6VDC
- Operate Time..... 10 mSec. Max.
- Release Time 10 mSec. Max.
- Dielectric Strength:
 - Between Coil & Contact..... 500VAC at 50/60 Hz
For one minute
 - Between Contacts 500VAC at 50/60 Hz
for one minute
- Surge Strength 1,500V (between coil & contact 1.2x50μSec.)
- Insulation Resistance 100 MegaΩ Min. at 500VDC
- Max. On/Off Switching:
 - Electrical 6 Cycles per Minute
 - Mechanical 300 Cycles per Minute

- Temperature Range..... -40~+85°C
- Humidity Range 45~85% RH.
- Coil Temperature Rise 70°C Max.
- Vibration:
 - Endurance 10 to 55 Hz dual
amplitude width 1.5mm
 - Error Operation 10 to 55 Hz dual
amplitude width 1.5mm
- Shock:
 - Endurance 1,000 m/S²
 - Error Operation 100 m/S²
- Life Expectancy:
 - Mechanical 10⁷ Operations at No
load condition
 - Electrical 10⁵ Operations at Rated
Resistive Load
- Weight.....About 5.2g for 1P
About 10.2g for 2P

Safety Standard & File Number

- NIL

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 Allowable Voltage (VDC) |
|------------------|-----------------------|----------------------|---------------------------------------|-----------------------|-----------------------|------------------------|---|
| JM-D | 6 | 133 | 45 | Abt. 0.8 | 60% Maximum | 5% Minimum | 150% (for short time carrying current) |
| | 9 | 90 | 100 | | | | |
| | 10 | 74 | 135 | | | | |
| | 12 | 66.7 | 180 | | | | |
| JM-L | 24 | 33.3 | 720 | Abt. 0.6 | 60% Maximum | 5% Minimum | 150% (for short time carrying current) |
| | 6 | 100 | 60 | | | | |
| | 9 | 66.7 | 135 | | | | |
| | 10 | 55.6 | 180 | | | | |
| | 12 | 50 | 240 | | | | |

Ordering Information

JM - SS - 1 12 D M

Contact Form:

Nil: One Form C

M: One Form A

B: One Form B

D: Standard DC

L: High DC

Coil Sensitivity:

06: 6V, 09: 9V, 10: 10V, 12: 12V, 24: 24V

Coil Voltage:

Number of Pole:

1: One Pole

2: Two Poles

Type of Sealing:

SS: RT II Flux Proofed

SH: RT III Wash Tight

Type:

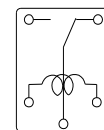
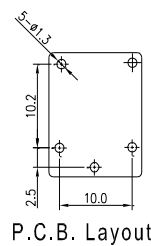
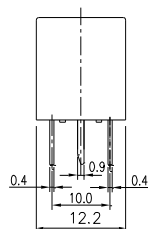
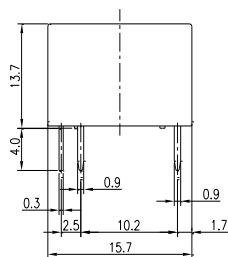
JM

Classification

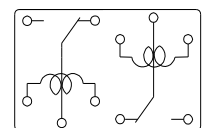
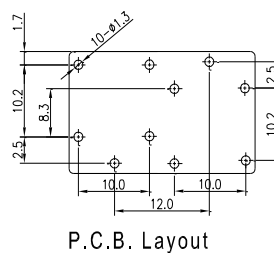
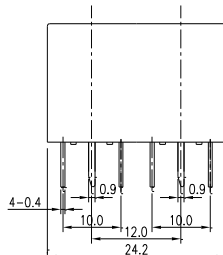
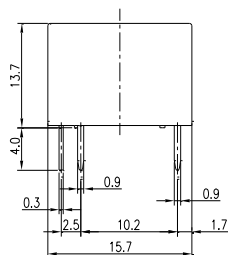
| Model | JM | | | | | | | | | | | |
|------------------|------------------|----|----|------------------|----|----|------------------|----|----|------------------|----|----|
| Coil Sensitivity | Standard DC | | | | | | High DC | | | | | |
| Number of Pole | 1 Pole | | | 2 Poles | | | 1 Pole | | | 2 Poles | | |
| Contact Form | 1C | 1A | 1B | 2C | 2A | 2B | 1C | 1A | 1B | 2C | 2A | 2B |
| Flux Proofed | 1C : JM-SS-1□□D | | | 2C : JM-SS-2□□D | | | 1C : JM-SS-1□□L | | | 2C : JM-SS-2□□L | | |
| | 1A : JM-SS-1□□DM | | | 2A : JM-SS-2□□DM | | | 1A : JM-SS-1□□LM | | | 2A : JM-SS-2□□LM | | |
| | 1B : JM-SS-1□□DB | | | 2B : JM-SS-2□□DB | | | 1B : JM-SS-1□□LB | | | 2B : JM-SS-2□□LB | | |
| Wash Tight | 1C : JM-SH-1□□D | | | 2C : JM-SH-2□□D | | | 1C : JM-SH-1□□L | | | 2C : JM-SH-2□□L | | |
| | 1A : JM-SH-1□□DM | | | 2A : JM-SH-2□□DM | | | 1A : JM-SH-1□□LM | | | 2A : JM-SH-2□□LM | | |
| | 1B : JM-SH-1□□DB | | | 2B : JM-SH-2□□DB | | | 1B : JM-SH-1□□LB | | | 2B : JM-SH-2□□LB | | |

Dimension ($\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, the tolerance of PCB thru hole: $\pm 0.1\text{mm}$)

JM-1



JM-2



V.01DS