Automotive Relay





Coil Data

Nominal Voltage : 12V DC

Coil Resistance : Refer to coil data chart
Operate Voltage : Refer to coil data chart
Release Voltage : Refer to coil data chart
Coil Power : 600mW, 800mW

Contact Data

Contact Form : C-1 form C
Contact Material : Ag Alloy

Contact Rating : 20A 14V DC Resistive

Max. Switching Voltage : 16V DC

Max. Carrying Current : 35A / 10 minutes. 25A / 1hr

Max. Switching Load : 35A

Max. Inrush Current : 60A

Min. Switching Load : 6V DC 1A

Contact Resistance : ≤50mΩ (6V DC 1A)

Life

Electrical : 100,000 operations
Mechanical : 10,000,000 operations

General Data

Min. Insulation Resistance : 100 M Ω 500V DC

Dielectric Strength : 500V AC, 1 min between open contacts

500V AC, 1 min between coil and contacts

Max. Operate Time : 10 ms
Max. Release Time : 10 ms

Operate Temperature : -30°C to +85°C

General Data

Shock Resistance

Min. Endurance : 100 m/s²
Mis-operation : 1,000 m/s²

Vibration Resistance

Endurance : 10-55 Hz, double amplitude 1.5mm Mis-operation : 10-55 Hz, double amplitude 1.5mm

Weight : Approximately 12g

Approximately 6g (open)

Coil Data Chart 20°C

| Nominal Voltage | Coil Resistance | Operate Voltage | Release Voltage | Coil Power |
|-----------------|-----------------|-----------------|-----------------|------------|
| V DC | Ω ±10% | ≤V DC | ≥V DC | mW |
| 12 | 180 | 7.2 | 1.2 | 800 |

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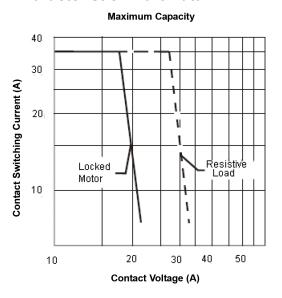


Diagram

Open 15.5 12 0.4 2.5 10.2 1.6

Wiring Diagrams Mounting Hole Layout

Characteristic Chart Data



Part Number Table

| Description | Part Number | |
|---------------------------------|-------------------|--|
| Relay, Auto, SPDT, 12V DC, 0.8W | MCCMA51-S-DC12V-C | |

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