Automotive Relays



Coil Data

RoHS Compliant



Coil Resistance : $39\Omega \pm 10\%$ at 23° C Nominal Current : $128\text{mA} \pm 10\%$ at 23° C

Operating Voltage : 3V DC Max.
Release Voltage : 0.5V DC Min.

Maximum Coil Voltage : 6.5V DC (130% of Nominal Voltage)

Nominal Operating Power : 640mW

Contact Data

Contact Form : 1 Form A - Normal Open

Contact Material : Ag Alloy

Contact Rating : Resistive: 20A 14V DC

Max. Switching Voltage : 16V DC

Max. Continuous Current : 35A/10min, 25A/1h

Max. Switching Current : 35A
Max. Inrush Current : 90A

Contact Resistance (Initial) : Max.100mΩ at 6V DC 1A

Electrical Durability : 200,000 operations at room temperature for rated

load (900 ops/hour).

Mechanical Durability : 10,000,000 operations at no load (18,000 ops/hour)

General Data

Insulation Resistance : $Min.100M\Omega$ at 500V DC

Dielectric Strength (Leakage current: 1mA)

Between contacts : 550V AC, 1 min, 50/60Hz Between Coil and Contact : 550V AC, 1 min, 50/60Hz

Operate Time : Max. 10ms.

Release Time : Max. 10ms.

Operating Temperature : -40°C to +85°C

Storage conditions

Storage Temperature : -40°C to +85°C

Environments : Store in locations where the product is not exposed to corrosive gas such as hydrogen

sulfide gas or salty air. Store in locations where the product is not exposed to the direct ray

of the sun and rain, snow.

Temperature Rise Coil : 70k max. by resistance method when 20A current is applied to contact and 110% of rated

voltage to relay coil at 85°C.

Terminal Strength

Tensile and pushing : To be free from any abnormality in both the construction and characteristics after pushing

and pulling the relay terminal 2mm from the body with below force for 10sec.

The tensile force: 10N; The pushing force: 2N.

Solderability : Solder should be finished 95% on dipped surface.

Soldering bath of melted solder at 260±5°C for 5±1 sec.

Resistance to Soldering Heat : To be free from any abnormality in both the construction and characteristics after the ter-

minals are dipped into the soldering bath 260±5°C for 10±1 seconds and then recover the relay in a room temperature and humidity for 2 hours. However, in the case of hand solder, it

must be soldered within 3.5±0.5 seconds at 350±10°C.

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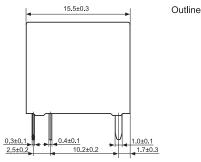
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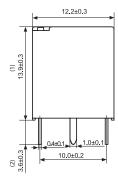
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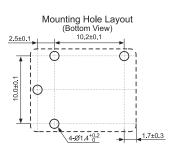


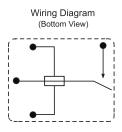
Diagram





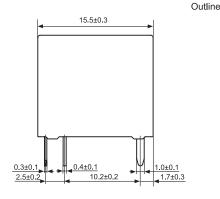


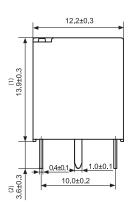


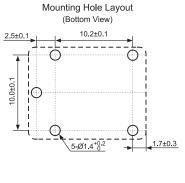


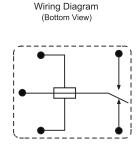
Note: Standard (1):13.9 \pm 0.3mm (2):3.6 \pm 0.3mm T-Reflow (1):14.5 \pm 0.3mm (2):3.0 \pm 0.3mm

1 Form C









Note: Standard (1):13.9±0.3mm (2):3.6±0.3mm T-Reflow (1):14.5±0.3mm (2):3.0±0.3mm

Part Number Table

Description	Part Number
Relay PCB NO 5V DC 0.64W	MP-CMA5GH-S-DC5V-A
Relay PCB CO 5V DC 0.64W	MP-CMA5GH-S-DC5V-C
Relay PCB NO 5V DC 0.64W	MP-CMA5G-S-DC5V-A
Relay PCB CO 5V DC 0.64W	MP-CMA5G-S-DC5V-C

Dimensions: Millimetres

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