

MQ8 POWER RELAY

SUBMINIATURE HIGH POWER RELAY

- ◆ 20A switching capability
- ◆ Used in automotive electrical appliances , house-hold appliances



Contact Data

| | |
|------------------------|--------------------------------------|
| Contact Arrangement | 1A 1B 1C |
| Contact Resistance | 100mΩ(1A 6VDC) |
| Contact Material | AgSnO ₂ ,AgCdO,AgNi alloy |
| Contact Rating | 10A 125VAC/20A 14VDC |
| Max. Switching Voltage | 125VAC,14VDC |
| Max. Switching Current | 20A |
| Max. Switching Power | 2500VA,280W |
| Mechanical Endurance | 1*10 ⁷ ops |
| Electrical Endurance | 1*10 ⁵ ops(10A 125VAC) |

Characteristics

| | | |
|-------------------------|------------------------------|----------------------------|
| Insulation Resistance | 100MΩ(500VDC) | |
| Dielectric Strength b/w | Coil&Contacts | 500VAC 50/60Hz 1min |
| | Open Contacts | 500VAC 50/60Hz 1min |
| Shock Resistance | Functional | 98m/s ² (10G) |
| | Destructive | 980m/s ² (100G) |
| Vibration Resistance | 10Hz~55Hz 1.5mm DA | |
| Humidity | ≤85% (at35°C) | |
| Ambient Temperature | -40°C~85°C | |
| Termination | PCB | |
| Unit Weight | Approx. 6g | |
| Construction | Plastic Sealed, Flux Proofed | |

Coil Data

The parameters listed are the initial values measured in the standard state, if the environmental state changes will have an impact on the actual parameters. The standard state is: temperature: 23°C±5°C, humidity: 25%-75%

| Nominal Voltage (VDC) | | Coil Resistance (Ω±10%) | | Pick-up Voltage VDC | Drop-out Voltage VDC | Coil Power (W) | Other (ms) |
|-------------------------|------------------|-------------------------|------|---------------------|----------------------|----------------|------------------|
| Nominal | Max. (at 85°C) | 0.36W | 0.6W | Nominal Voltage 75% | Nominal Voltage 10% | | |
| 5 | 7.5 | 69 | 41.6 | 3.75 | 0.50 | 0.36/0.6 | Pick-up Time ≤10 |
| 6 | 9 | 100 | 60 | 4.50 | 0.60 | | |
| 9 | 13.5 | 225 | 135 | 6.75 | 0.90 | | Drop-out Time ≤5 |
| 12 | 18 | 400 | 240 | 9.00 | 1.20 | | |
| 24 | 36 | 1600 | 960 | 18.00 | 2.40 | | |

Safety Approval Ratings

| | |
|-----|---------------------------------------|
| CQC | 7A 250VAC |
| TUV | 10A 250VAC 10A 125VAC 15A 14VDC |

Soldering Conditions

| | |
|----------------------|--|
| Wave Soldering | 260±5°C 3-5s (sec) |
| Soldering Resistance | Must be free from any abnormality in both the construction and characteristics after the terminals are dipped into solder at 260±5°C for 10 seconds and 350±5°C for 3 seconds and then left in room temperature and humidity for 2 hours |

► Ordering Information

| | | | | |
|--------------|--|-----|-----|---------|
| | MQ8 | - C | - S | - DC12V |
| Type | | | | |
| Contact Form | A: 1 Form A B: 1 Form B | | | |
| | C: 1 Form C | | | |
| Construction | S : Plastic Sealed E : Flux Proofed | | | |
| Coil Voltage | 5, 6, 9, 12, 24 | | | |

*1) We suggest to choose plastic sealed types and validate it in real application for an unclean environment (with contaminations like H₂S, SO₂, NO₂, dust, etc), and verified by using it in real situations ;

2) Contact is recommended for suitable condition and specifications if water cleaning or surface process is involved in assembling relays on PCB ;

3) AgSnO₂ material contacts are recommended for application scenarios where capacitive loads, lamp loads, motor load lamps generate high inrush currents at the moment of relay turn-on ;

4) If customers have any special requirements, they need to contact our company for evaluation and then choose the corresponding product type according to the characteristics.

► Outline Dimensions, PCB Layout and Wiring Diagram (Unit : mm)

