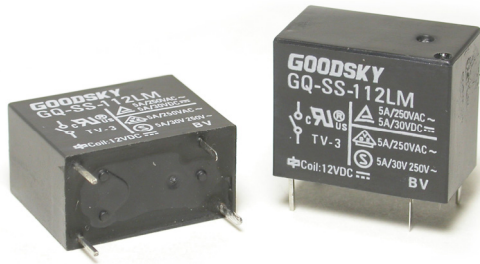


Main Feature



1. The contact form construction is 1a (SPST).
2. Miniature size with high sensitive type 200mW, high contact reliability with sealed type.
3. The Surge Strength of GQ Series is 10,000V.
4. The selection of plastic insulation material is designed for high temperature and provides better chemical solution performance.
5. Halogen Free series is available.

Contact Rating

| Load Type | GQ (LM) | GQ (LM1) |
|----------------------------|-----------|-------------|
| Rated Load (Resistive) | 5A 250VAC | 10A 250VAC |
| | - | 12A 120 VAC |
| | 5A 30VDC | 10A 30VDC |
| Contact Capacity | - | TV-5 120VAC |
| Rated Carrying Current | 5A | 10A |
| Max. Allowable Voltage | AC 250V | AC 250V |
| | DC 30V | DC 30V |
| Max. Allowable Current | 5A | 12A |
| Max. Allowable Power Force | 1,250VA | 2,500VA |
| | 300W | 300W |
| Contact Material | Ag Alloy | Ag Alloy |
| Contact Form | SPST | SPST |

Application

Domestic Appliances, Office Machines, Audio Equipment, etc.

Performance (at Initial Value)

- Contact Resistance 100mΩ Max. @1A,6VDC
- Operate Time..... 10mSec. Max.
- Release Time 5 mSec. Max.
- Dielectric Strength :
Between Coil & Contact 4,000VAC at 50/60 Hz for one minute.
Between Contacts 1,000VAC at 50/60 Hz For one minute.
- Surge Strength 10,000V (between coil & contact 1.2x50μSec.)
- Insulation Resistance 100 MegaΩ Min. at 500VDC.
- Max. On/Off Switching :
Electrical..... 20 Cycles per Minute.
Mechanical 300 Cycles per Minute.
- Temperature Range..... -40~ 105°C
- Humidity Range 45~ 85% RH.
- Coil Temperature Rise..... 40°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.
2.5x10⁴ Operations at TV Rated Load.
- Weight About 9.0 g.

Safety Standard & Its File Number

- LM:
UL & C-UL..... E141060
TÜV R50121172
VDE..... 40025456
- LM1:
UL & C-UL..... E141060
TÜV R50121172

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) |
|------------------|-----------------------|----------------------|---------------------------------------|-----------------------|-----------------------|------------------------|---------------------------------|
| GQ | 3 | 67 | 45 | Abt. 0.20 | 80% Maximum | 5% Minimum | 110% |
| | 5 | 40 | 125 | | | | |
| | 6 | 33.3 | 180 | | | | |
| | 9 | 22.5 | 400 | | | | |
| | 12 | 16.7 | 720 | | | | |
| | 15 | 13.3 | 1,125 | | | | |
| | 24 | 8.3 | 2,880 | | | | |
| | 48 | 4.2 | 11,520 | | | | |

Ordering Information

GQ - SS - 1 12 L M 1 F

Insulation System:

Nil: Standard Class

F: F Class

Rated Carrying Current:

Nil: 5A

1: 10A

Contact Form:

M: One Form A

Coil Type:

L: High Sensitivity DC Coil

Coil Voltage:

03: 3V, **05:** 5V, **06:** 6V, **09:** 9V, **12:** 12V

15: 15V, **24:** 24V, **48:** 48V

Number of Pole:

1: One Pole

Type of Sealing:

SS : RT II Flux Proofed Relays

SH : RT III Wash Tight Relays

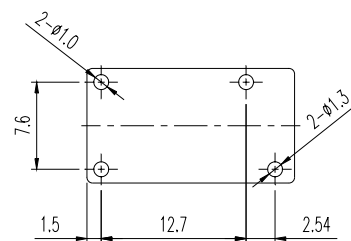
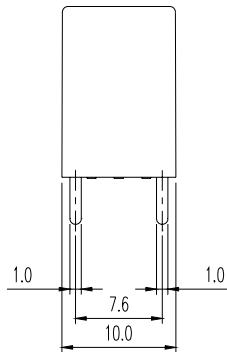
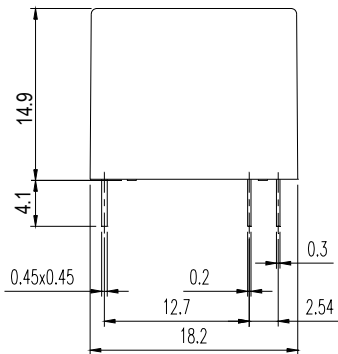
Type:

GQ

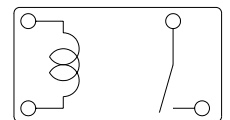
Classification

| Model | GQ | |
|------------------------|-------------|----------------|
| Rated Carrying Current | 5A | 10A |
| Flux Proofed Relay | GQ-SS-1□□LM | GQ-SS-1□□LM1/F |
| Wash Tight Relay | GQ-SH-1□□LM | GQ-SH-1□□LM1/F |

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



P.C.B. Layout



BOTTOM VIEW