



Main Feature

1. Miniature size with low power consumption for rated loading to 12A.
2. Surge Strength up to 10,000V.
3. Operating temperature up to 105°C.
4. Halogen Free series available.

Contact Rating

Load Type	GQ (LM)	GQ (LM1)
Rated Load (Resistive)	5A 250VAC	10A 277VAC
	-	12A 125 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.
 - TV Rated Load. 2.5x10⁴ Operations at
- Weight About 9.0 g.

Safety Standard & 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				
	18	11.1	1,620				
	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, 18: 18V, 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

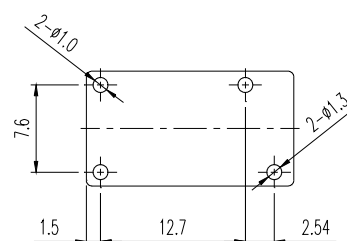
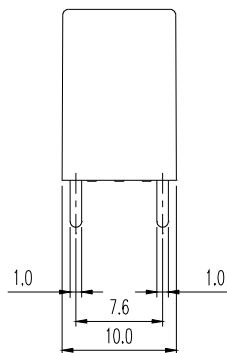
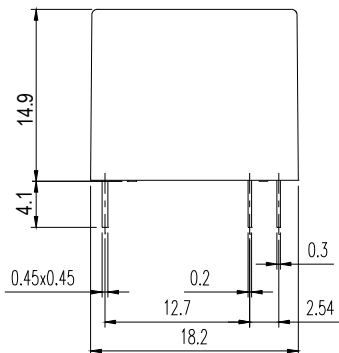
Type:

GQ

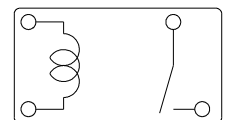
Classification

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