



## 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.
5. UL Class F insulation available.
6. Comply with RoHS and REACH regulations.

## CONTACT RATING

Load Type	GQ (LM)	GQ (LM1)
Rated Load (Resistive)	5A 250VAC	10A 250VAC
	-	12A 125VAC
	5A 30VDC	10A 30VDC
	-	10A 277VAC
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
	150W	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 ..... 6 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:
  - Destruction ..... 10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5mm double amplitude)
  - Malfunction ..... 10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5mm double amplitude)
- Shock:
  - Destruction ..... 1,000 m/S<sup>2</sup>
  - Malfunction ..... 100 m/S<sup>2</sup>
- Life Expectancy:
  - Mechanical..... 10<sup>7</sup> Operations at no Load condition
  - Electrical ..... 10<sup>5</sup> Operations at Rated Resistive Load
  - 2.5x10<sup>4</sup> Operations at TV Rated Load
- 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
  - CQC..... 14002112636

**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**

	<b>Insulation System:</b>	<b>Nil:</b> Standard Class <b>F:</b> Class F
	<b>Rated Carrying Current:</b>	<b>Nil:</b> 5A <b>1:</b> 10A
	<b>Contact Form:</b>	<b>M:</b> One Form A
	<b>Coil Sensitivity:</b>	<b>L:</b> High DC
	<b>Coil Voltage:</b>	<b>03:</b> 3V, <b>05:</b> 5V, <b>06:</b> 6V, <b>09:</b> 9V, <b>12:</b> 12V <b>15:</b> 15V, <b>18:</b> 18V, <b>24:</b> 24V, <b>48:</b> 48V
	<b>Number of Pole:</b>	<b>1:</b> One Pole
	<b>Type of Sealing:</b>	<b>SS:</b> RT II Flux Proofed <b>SH:</b> RT III Wash Tight
	<b>Type:</b>	<b>GQ</b>

**CLASSIFICATION**

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

**DIMENSION ( ≤ 5mm ± 0.2mm, > 5mm ± 0.3mm, the tolerance of PCB thru hole: +0.1mm)**

