



MAIN FEATURE

1. Miniature size with low power consumption for rated loading up to 16A.
2. Surge Strength up to 10,000V.
3. Operating temperature up to 105°C.
4. UL Class F insulation available.
5. Comply with RoHS and REACH regulations.
6. 3-in-1 combo available with THR reflow solderable + Halogen Free + IEC 60335-1 GWT Compliance.

CONTACT RATING

Load Type	GQ (LM)	GQ (LM1)	GQ(DM2F)
Rated Load (Resistive)	5A 250VAC	10A 250VAC	16A 277VAC (TUV)
	-	12A 125VAC	-
	5A 30VDC	10A 30VDC	-
Rated Carrying Current	5A	10A	16A
Max. Allowable Voltage	AC 250V	AC 250V	AC 277V
	DC 30V	DC 30V	-
Max. Allowable Current	5A	12A	16A
Max. Allowable Power Force	1,250VA	2,500VA	4432VA
	150W	300W	-
Contact Material	Ag Alloy	Ag Alloy	Ag Alloy
Contact Form	SPST	SPST	SPST

APPLICATION

Domestic Appliances, HVAC, Office Machines, Audio Equipment, etc.

PERFORMANCE (AT INITIAL VALUE)

- Contact Resistance 100mΩ Max. @1A,6VDC
- Operate Time 10 mSec. 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/S²
 - Malfunction 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 & FILE NUMBER

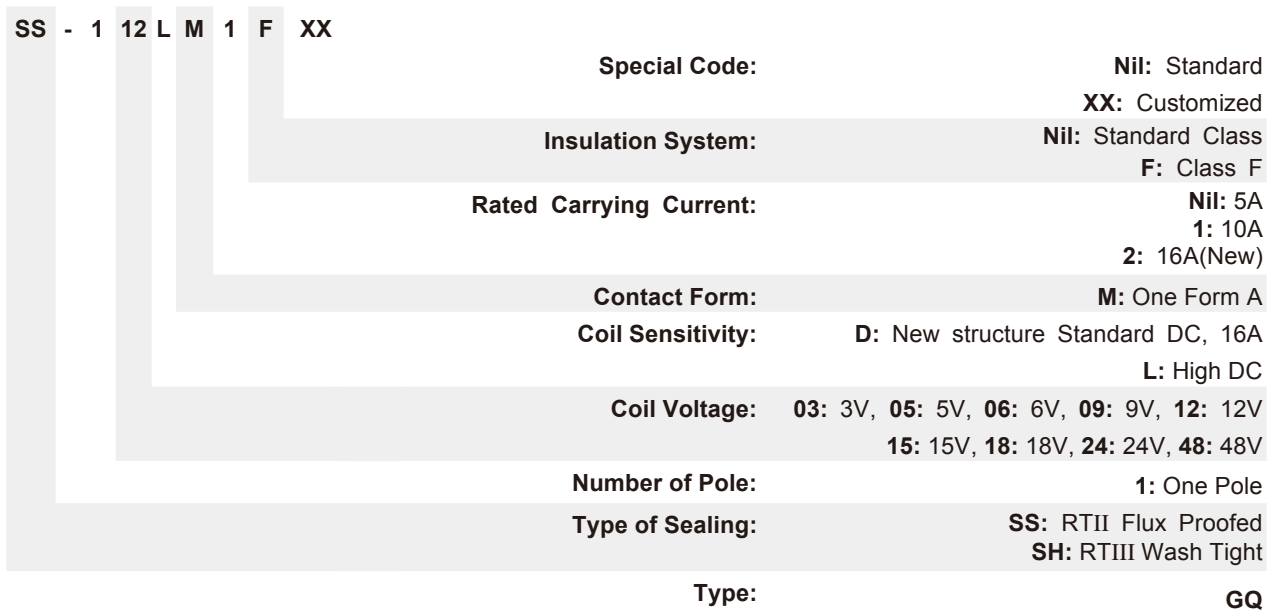
- LM:
 - UL & C-UL E141060
 - TÜV R50121172
 - VDE 40025456
- LM1:
 - UL & C-UL E141060
 - TÜV R50121172
 - CQC 14002112636
- DM2F:
 - UL in progress
 - TUV R50121172
 - VDE in progress

COIL SPECIFICATION (AT 20°C)

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum Allowable Voltage (VDC)
GQ(LM/LM1)	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				
GQ(DM2F)	48	4.2	11,520	Abt. 0.36	80% Maximum	5% Minimum	110%
	5	71.4	70				
	6	60	100				
	9	40	225				
	12	30	400				
	15	24	625				
	18	20	900				
	24	15	1,600				
	48	7.5	6,400				

ORDERING INFORMATION

GQ - SS - 1 12 L M 1 F XX



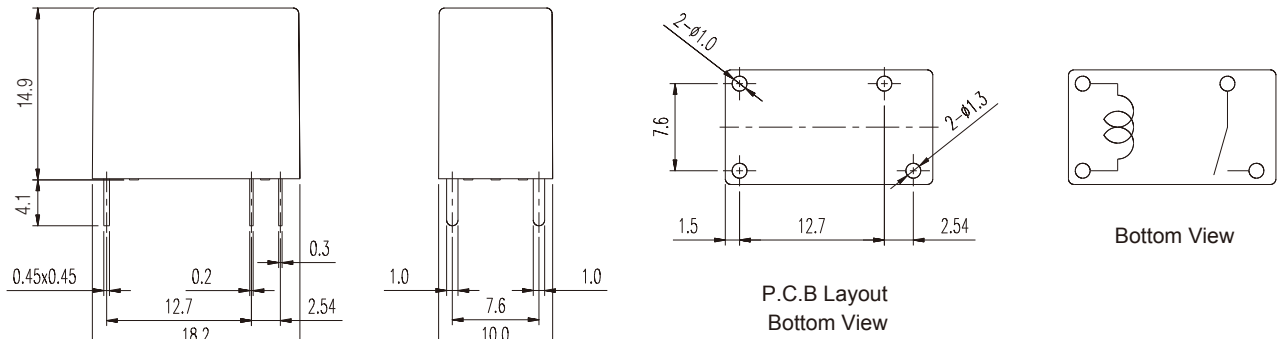
****Note: 16A comes with standard Class F insulation and the ordering part no. shall be "DM2F".**

CLASSIFICATION

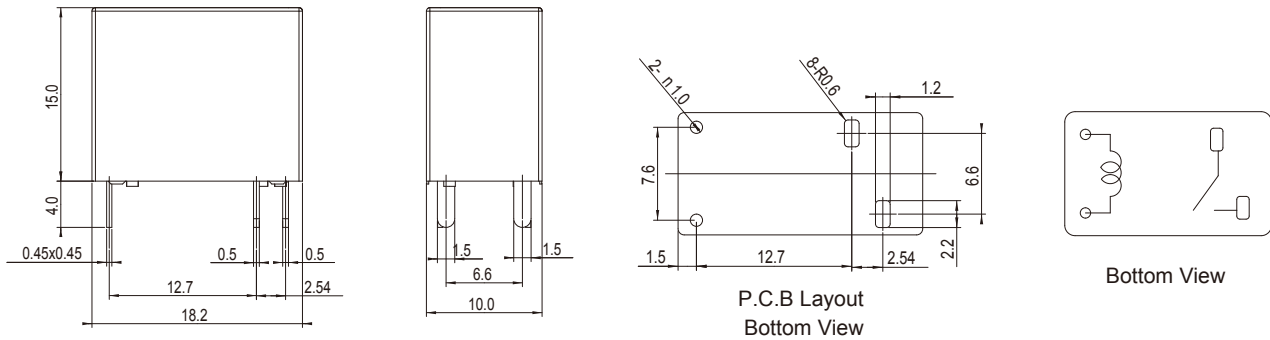
Model	GQ		
	5A	10A	16A
Rated Carrying Current			
Flux Proofed	GQ-SS-1□□LM	GQ-SS-1□□LM1/F	GQ-SS-1□□DM2F
Wash Tight	GQ-SH-1□□LM	GQ-SH-1□□LM1/F	GQ-SH-1□□DM2F

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

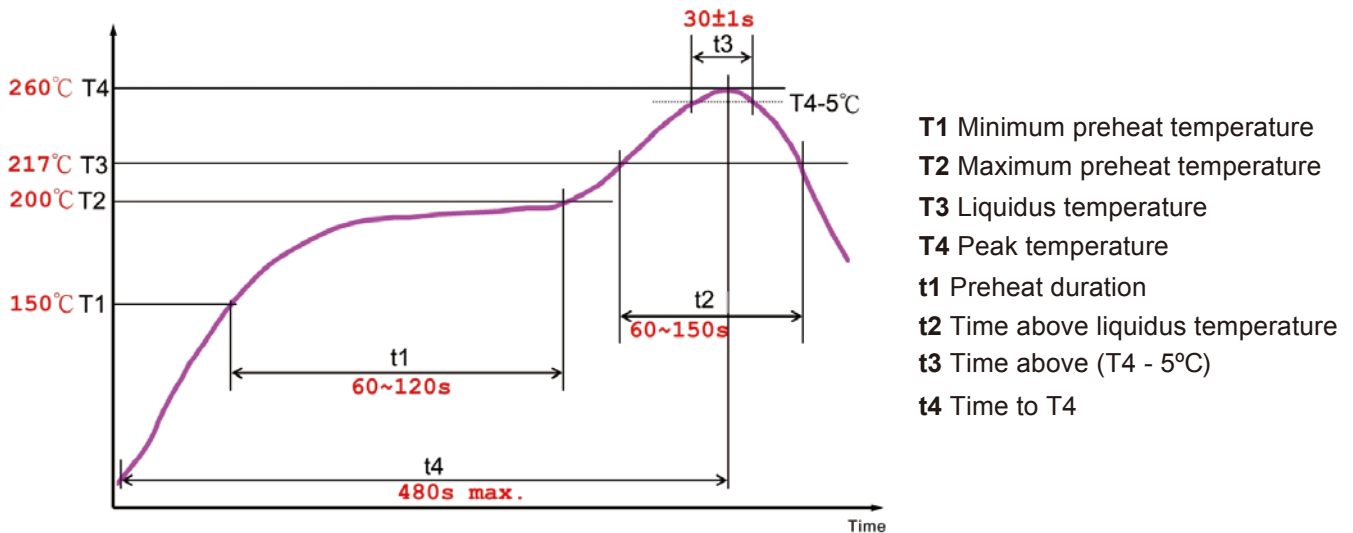
GQ-LM/LM1



GQ-DM2F



Reflow soldering condition: According to IEC 60068-2-58.



Note: we recommend that you confirm your actual solder conditions.