

## MAIN FEATURE

1. SF: Flat formed type power relay rating 16A.
2. SFG: Flat formed type power relay with fasten terminals and PC board terminals.
3. Low power consumption 200mW.
4. Halogen Free series available.
5. Comply with RoHS and REACH regulations.

## CONTACT RATING

Load Type	SF (DM)	SFG (DM)
Rated Load (Resistive)	15A 125VAC	12A 125VAC
	10A 277VAC	10A 277VAC
	16A 250VAC (TÜV)	TV-5 120VAC
	15A 24VDC (TÜV)	10A 24VDC
Contact capacity	1/4HP 125/250VAC	-
	TV-5 120VAC	
Rated Carrying Current	16A	12A
Max. Allowable Voltage	AC 277V	AC 277V
Max. Allowable Current	16A	12A
Max. Allowable Power Force	4,000VA	2,770VA
	360W	240W
Contact Material	Ag Alloy	Ag Alloy
Contact Form	SPST	SPST

## APPLICATION

Domestic, Appliance, Office Machine, Air Conditioner, Controlling Equivalent, etc.

## PERFORMANCE (AT INITIAL VALUE)

- Contact Resistance ..... 100mΩ Max. @1A,6VDC
- Operate Time ..... 20 mSec. Max.
- Release Time ..... 10 mSec. Max.
- Dielectric Strength:
  - Between Coil & Contact ..... 1,500VAC at 50/60 Hz for one minute
  - Between Contacts ..... 1,000VAC at 50/60 Hz for one minute
- Surge Strength ..... 5,000V (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~+85°C
- Humidity Range ..... 45~85% RH.
- Coil Temperature Rise .... 35°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
- Weight ..... About SF : 8.5 g  
SFG : 9.0 g

## SAFETY STANDARD & FILE NUMBER

- SF: UL & C-UL ..... E141060  
TÜV ..... R09956053
- SFG: NIL

**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)
SF/SFG	5	40	125	Abt. 0.20	70% Maximum	5% Minimum	150%
	6	34	180				
	9	23	405				
	12	17	720				
	18	11	1,620				
	24	8.3	2,880				
	48	4.2	11,520				
	100	5.6	18,000	Abt. 0.56			

**ORDERING INFORMATION**

SF - SS - 1 12 D M F

**Insulation System:**

**Nil:** Standard Class

**F:** Class F

**Contact Form:**

**M:** One Form A

**Coil Type:**

**D:** Standard DC

**Coil Voltage:**

**05:** 5V, **06:** 6V, **09:** 9V, **12:** 12V, **18:** 18V, **24:** 24V, **48:** 48V, **100:** 100V

**Number of Pole:**

**1:** One Pole

**Type of Sealing:**

**SS:** RT II Flux Proofed

**SH:** RT III Wash Tight

**Type:**

**SF**

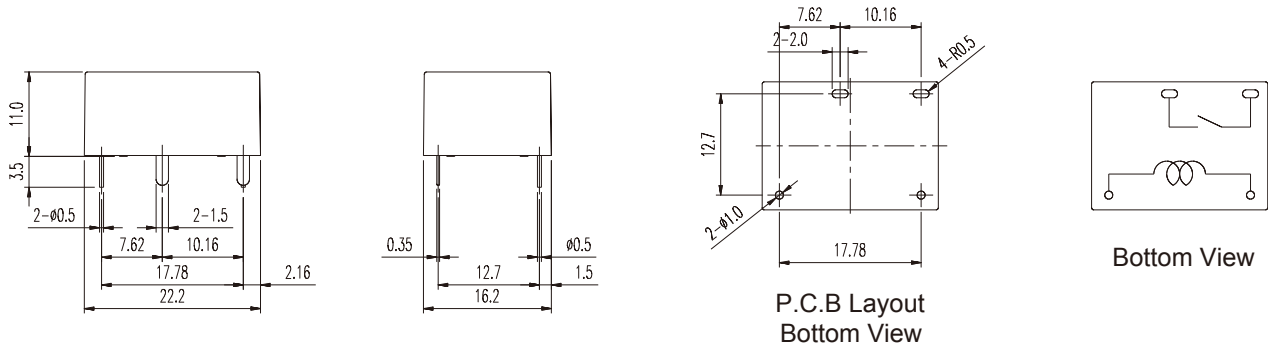
**SFG**

**CLASSIFICATION**

Model	SF	SFG
Contact Form	1A	1A
Flux Proofed	SF-SS-1□□DM	SFG-SS-1□□DM
Wash Tight	SF-SH-1□□DM	SFG-SH-1□□DM

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

**SF-SS/SH**



**SFG-SS**

