

## Main Feature

1. Two Change-Over Contacts available.
2. 6mm insulation distance with Surge Strength 5,000V.
3. TV-5 120VAC certified by UL.
4. Dielectric Strength up to 3,000VAC.

## Contact Rating

Load Type	GSA (DM)
Rated Load (Resistive)	5 A 250VAC
	5 A 120VAC
	5 A 30 VDC
Contact capacity	TV-5 120VAC
Rated Carrying Current	5A
Max. Allowable Voltage	AC 250V
	DC 30V
Max. Allowable Current	5A
Max. Allowable Power Force	1250VA
	150W
Contact Material	Ag Alloy
Contact Form	DPST

## Application

Audio Equipment, Controlling Equipment, Home Appliance...etc.

## Performance (at Initial Value)

- Contact Resistance ..... 100mΩMax. @1A,6VDC
- Operate Time..... 20 mSec. Max.
- Release Time ..... 10 mSec. Max.
- Dielectric Strength:  
Between Coil & Contact ..... 3,000VAC 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 ..... 20 Cycles per Minute.  
Mechanical ..... 300 Cycles per Minute.
- Temperature Range..... -30~55°C
- Humidity Range..... 45~85% RH.

- Coil Temperature Rise .....55°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/S<sup>2</sup> .  
Error Operation .....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 13.8 g.

## Safety Standard & File Number

- UL & C-UL.....E141060
- TÜV.....R09854034

## 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)
GSA	3	176.5	17	Abt. 0.54	80% Maximum	5% Minimum	130%
	5	106.4	47				
	6	88	68				
	9	58	155				
	12	44.4	270				
	24	21.8	1,100				
	48	11	4,400				

## Ordering Information

GSA - SS - 2 12 D M

**Contact Form:** M: Form A

**Coil Type:** D: Standard DC Coil

**Coil Voltage:** 03: 3V, 05: 5V, 06: 6V, 09: 9V, 12: 12V, 24: 24V, 48: 48V

**Number of Pole:** 2: Two Poles

**Type of Sealing:** SS: RT II Flux Proofed Relays

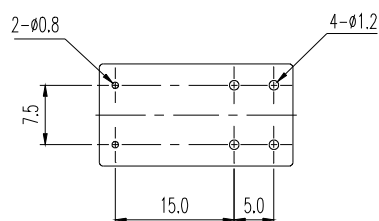
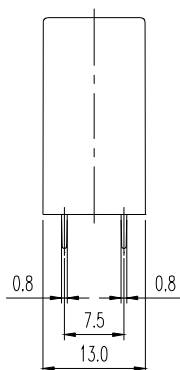
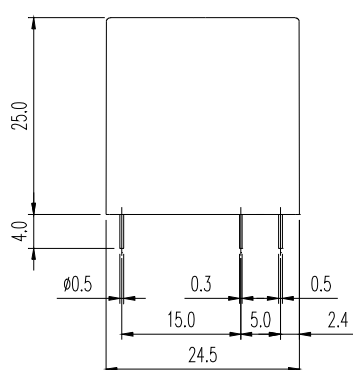
SH: RT III Wash Tight Relays

**Type:** GSA

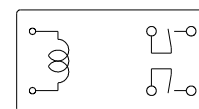
## Classification

Model	GSA
Contact Form	2A
Flux Proofed Relay	GSA-SS-2□□DM
Wash Tight Relay	GSA-SH-2□□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:  $+0.1\text{mm}$ )



P.C.B. Layout



BOTTOM VIEW