



## Main Feature

1. 8mm clearance and creepage distance.
2. Slim size with high capacity up to 25A.
3. Dielectric Strength 5,000 VAC/ Surge Resistance (7000V).
4. Class F insulation system.
5. Halogen Free series available.



## Contact Rating

Load Type	GZR (LM/DM)	GZR (L/D)
Rated Load (Resistive)	20A 277VAC	20A 277VAC (N/O) 16A 277VAC (N/C)
	20A 30VDC	20A 30VDC (N/O) 16A 30VDC (N/C)
	25A 125VAC	25A 125VAC (N/O) (at 70°C)
Contact Capacity	1HP 250VAC	1HP 250VAC
	TV-10 120VAC	TV-10 120VAC (N/O)
Rated Carrying Current	25A	25A
Max. Allowable Voltage	AC 380V	AC 380V
	DC125V	DC125V
Max. Allowable Current	25A	25A
Max. Allowable Power Force	5540VA	5540VA
	600W	600W
Contact Material	Ag Alloy	Ag Alloy
Contact Form	SPST	SPDT

## Application

General Control, Home Appliance.

## Performance (at Initial Value)

- Contact Resistance ..... 100mΩ Max. @1A,6VDC
- Operate Time..... 15mSec. Max.
- Release Time ..... 5 mSec. Max.
- Dielectric Strength:
  - Between Coil & Contact.....5,000VAC at 50/60 Hz for one minute
  - Between Contacts..... 1,000VAC at 50/60 Hz for one minute
- Surge Resistance ..... 7,000V (between coil & Contact 1.2 / 50μSec.)
- Insulation Resistance ..... 1,000 MΩ Min. at 500VDC.
- Max. On/Off Switching:
  - Electrical ..... 20 Cycles per Minute.
  - Mechanical..... 300 Cycles per Minute.
- Temperature Range.....-40~85°C
- Humidity Range..... 5~85% RH.

- 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 ..... 1x10<sup>7</sup> Operations at No Load condition.
  - Electrical..... 10<sup>5</sup> Operations at Rated Resistive Load.
- Contact Material ..... Ag Alloy.
- Weight ..... About 17g.

## Safety Standard & File Number

- UL & C-UL ..... E141060

## 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)
GZR/D/DM	3	240	13	Abt. 0.72	70% Maximum	15% Minimum	170%
	5	144	36				
	6	120	50				
	9	80	112.5				
	12	60	200				
	15	48	313				
	18	40	450				
	24	30	820				
GZR/L/LM	3	176.7	17	Abt. 0.53	70% Maximum	15% Minimum	170%
	5	106	47				
	6	88.3	68				
	9	58.8	155				
	12	44.2	275				
	15	35.3	425				
	18	29.4	612				
	24	22.08	1100				
	48	11.04	4170				

## Ordering Information

<b>GZR - S - 1 05 D M F</b>	<b>Insulation System:</b>	<b>Nil:</b> Standard Class <b>F:</b> F Class
	<b>Contact Form:</b>	<b>M:</b> One Form A <b>Nil:</b> One Form C <b>D:</b> Standard DC Coil <b>L:</b> High Sensitivity DC Coil
	<b>Coil Type:</b>	
	<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>S:</b> RT I Dust Protected Relays <b>SS:</b> RT II Flux Proofed Relays <b>SH:</b> RT III Wash Tight Relays
	<b>Type:</b>	<b>GZR</b>

## Classification

Model	GZR			
	Standard DC Coil		High Sensitivity DC Coil	
Coil Sensitivity				
Contact Form	1A	1C	1A	1C
Dust Protected Relay	GZR-S-1□□DM	GZR-S-1□□D	GZR-S-1□□LM	GZR-S-1□□L
Flow Solder Type	GZR-SS-1□□DM	GZR-SS-1□□D	GZR-SS-1□□LM	GZR-SS-1□□L
Plastic Sealed Type	GZR-SH-1□□DM	GZR-SH-1□□D	GZR-SH-1□□LM	GZR-SH-1□□L

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

