

## Main Feature



1. Slim size (28.8x12.7x25.5mm).
2. 8mm clearance and creepage distance.
3. High-capacity (16A) types available
4. Complete protective structure is designed from dust and soldering flux. If required, plastic sealed type is available for washing procedure

## Contact Rating

| Load Type                  | GZR(LM/DM) | GZR(L/D)   |
|----------------------------|------------|------------|
| Rated Load (Resistive)     | 16A 250VAC | 16A 250VAC |
|                            | 16A 30VDC  | 16A 30VDC  |
| Rated Carrying Current     | 16A        | 16A        |
| Max. Allowable Voltage     | AC 380V    | AC 380V    |
|                            | DC125V     | DC125V     |
| Max. Allowable Current     | 16A        | 16A        |
| Max. Allowable Power Force | 480W       | 480W       |
| 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.
- Operating Temperature Range.....-40°~+70°C
- Humidity Range..... 5~85% RH.

- Storage Temperature
- Range..... -40°~+70°C
- 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 & Its File Number

- 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) |
|------------------|-----------------------|----------------------|---------------------------------------|-----------------------|-----------------------|------------------------|---------------------------------|
| GZR/D/DM         | 3                     | 240                  | 13                                    | Abt. 0.72             | 70% Maximum           | 15% Minimum            | 170%                            |
|                  | 5                     | 144                  | 36                                    |                       |                       |                        |                                 |
|                  | 6                     | 120                  | 50                                    |                       |                       |                        |                                 |
|                  | 12                    | 60                   | 200                                   |                       |                       |                        |                                 |
|                  | 15                    | 48                   | 313                                   |                       |                       |                        |                                 |
|                  | 18                    | 40                   | 450                                   |                       |                       |                        |                                 |
|                  | 24                    | 30                   | 820                                   |                       |                       |                        |                                 |
|                  | 48                    | 15                   | 3300                                  |                       |                       |                        |                                 |
| GZR/L/LM         | 3                     | 176.7                | 17                                    | Abt. 0.53             | 70% Maximum           | 15% Minimum            | 170%                            |
|                  | 5                     | 106                  | 47                                    |                       |                       |                        |                                 |
|                  | 6                     | 88.3                 | 68                                    |                       |                       |                        |                                 |
|                  | 12                    | 44.2                 | 275                                   |                       |                       |                        |                                 |
|                  | 15                    | 35.3                 | 425                                   |                       |                       |                        |                                 |
|                  | 18                    | 29.4                 | 612                                   |                       |                       |                        |                                 |
|                  | 24                    | 22.08                | 1100                                  |                       |                       |                        |                                 |
|                  | 48                    | 11.04                | 4170                                  |                       |                       |                        |                                 |
|                  | 100                   | 5.3                  | 18860                                 |                       |                       |                        |                                 |

## Ordering Information

|                    |                  |  |
|--------------------|------------------|--|
| GZR - S - 1 05 D M | Capacity Type:   | Nil:   |
|                    | Contact Form:    | M: One Form A<br>NIL: One Form C   |
|                    | Coil Type:       | D: Standard DC Coil<br>L: High Sensitivity DC Coil   |
|                    | Coil Voltage:    | 03:3V, 05:5V, 06:6V, 09:9V, 12:12V, 15:15V,<br>18:18V, 24:24V, 48:48V, 60:60V, 100:100V        |
|                    | Number of Pole:  | 1: One Pole 2: Two Pole  |
|                    | Type of Sealing: | S: RT I Dust Protected Relays<br>SS: RT II Flux Proofed Relays<br>SH: RT III Wash Tight Relays |
|                    | Type:            | GZR  |

## 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:  $+0.1\text{mm}$ )

