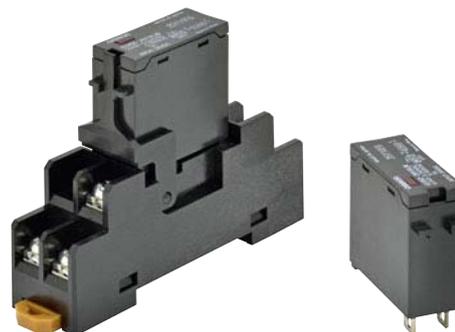


## Power MOS FET Relays with the Same Shape as the G2R for Both AC and DC, Capable of 1 A Load Switching

- Capable of switching 1-A load at 240 VAC or 100 VDC.
- Maximum leakage current of 10  $\mu$ A for OFF output.
- Withstand voltage 2,500 VAC between inputs and outputs.
- Built-in input resistance and overvoltage absorption circuit.
- Capable of AC full-wave rectification and half-wave rectification load operation.

RoHS Compliant



 Refer to the *Common Solid State Relay Precautions*.

## Model Number Legend

G3RZ - 

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1 2 3 4 5

- 1. Load voltage**  
2: Load voltage: 240 VAC, 100 VDC
- 2. Load Current**  
01: Load current: 1 A

- 3. Terminal Shape**  
S: Plug-in terminals
- 4. Zero cross function**  
L: No zero cross function

- 5. Operation Indicator**  
N: With operation indicator

## Ordering Information

Insulation method	Zero cross function	Operation Indicator	Applied output load	Input rated voltage	Model
Photovoltaic coupler	No	Yes	1.0 A, 5 to 240 VAC, or 5 to 100 VDC	5 VDC	G3RZ-201SLN DC5
				12 VDC	G3RZ-201SLN DC12
				24 VDC	G3RZ-201SLN DC24

## Ratings and Specifications

### Ratings

Model	Input					Output			
	Rated voltage	Operating voltage	Impedance	Voltage level		Rated load voltage	Load voltage range	Load current*	Surge with-stand current
				Must-operate voltage	Must-release voltage				
G3RZ-201SLN	5 VDC	4 to 6 VDC	400 $\Omega$ $\pm$ 20%	4 VDC max.	1 VDC min.	5 to 240 VAC 5 to 100 VDC	3 to 264 VAC 3 to 125 VDC	100 $\mu$ A to 1.0 A	10 A (10 ms)
	12 VDC	9.6 to 14.4 VDC	1.1 k $\Omega$ $\pm$ 20%	9.6 VDC max.					
	24 VDC	19.2 to 28.8 VDC	2.2 k $\Omega$ $\pm$ 20%	19.2 VDC max.					

\* Depends on the ambient temperature. Refer to the reference data *Load Current vs. Ambient Temperature Rating* on page 2 for details.

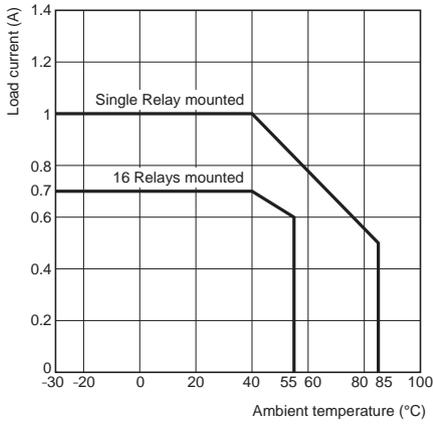
### Characteristics

Operation time	6 ms max.
Release time	10 ms max.
Output ON resistance	2.4 $\Omega$ max.
OFF leakage current	10 $\mu$ A max. (at 125 VDC) 100 $\mu$ A max. (at 200 VAC)
Insulation resistance	100 M $\Omega$ min. (at 500 VDC)
Dielectric strength	2,500 VAC at 50/60 Hz for 1 min. between inputs and outputs
Vibration resistance	10 to 55 to 10 Hz, 0.75-mm single amplitude (1.5-mm double amplitude)
Shock resistance	1,000 m/s <sup>2</sup>
Storage temperature	-30 to 100°C (with no icing or condensation)
Ambient operating temperature	-30 to +85°C (with no icing or condensation)
Ambient operating humidity	45% to 85%
Weight	Approx. 20 g

## Engineering Data

### Load Current vs. Ambient Temperature Rating

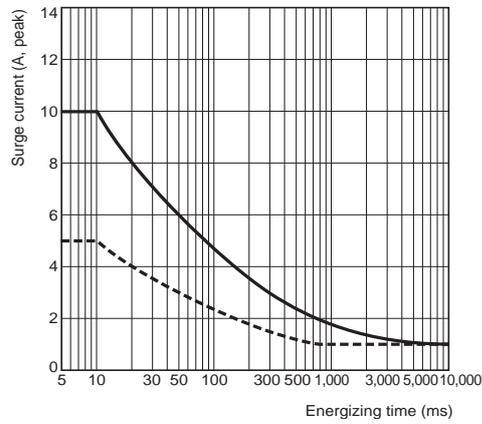
#### G3RZ-201SLN



### Surge withstand current

Non-repetitive (If repetitive, keep the inrush current below the dotted line.)

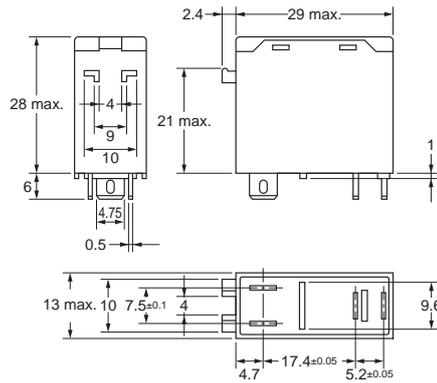
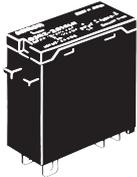
#### G3RZ-201SLN



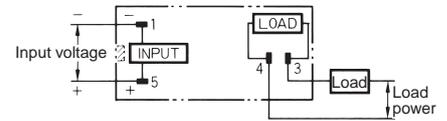
## Dimensions

(Unit: mm)

#### G3RZ-201SLN



#### Terminal Arrangement/Internal Connections (Bottom View)



## Options (Order Separately)

### Connection Sockets

Use one of the following Sockets: P2RF-05, P2RF-05-E, P2RF-05-S, P2R-05A, P2R-05P, or P2R-057P. Refer to your OMRON website for details.

## Safety Precautions

Refer to the *Common Solid State Relay Precautions* for common precautions.

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