

## Solid-state Relay

## G3FM

### 100- $\mu$ A-max. Leakage Current, No Bleeder Resistor Required

- 1 mA to 500 mA micro-load switching.
- Switches to both AC and DC with no polarity.
- Switches for a wide range of voltages; 19.2 to 264 VAC, 19.2 to 125 VDC.
- Switches full- and half-wave rectifier AC loads.
- Same sizes and terminal arrangement as OMRON Power Relay MY Series.
- Operating indicator provided.
- Switches MY Series (without bleeder resistor).
- Superior surge absorption with a built-in varistor.
- Optimum SSR to control minute load, valves, and solenoids.



### Ordering Information

Isolation	Zero cross function	Indicator	Applicable output load	Rated input voltage	Model
Photo-voltage coupler	No	Yes	0.5 A at 19.2 to 264 VAC	5 VDC	G3FM-2R5SLN
			0.5 A at 19.2 to 125 VDC	12 VDC	
				24 VDC	

### ■ Accessories (Order Separately)

#### Connecting Socket

Refer to page 244 for details.

Item	PYF08A-E	PY08	PY08-02	PY08QN(2)
Connecting	Front connecting	Back connecting		
Mounting method/ Terminal type	Track mounted/ screw terminals	Solder terminals	PCB terminals	Wrapping terminals
Hold-down clip	PYC-A1	PYC-P		

### Specifications

#### ■ Ratings

Model	Input					Output			
	Rated voltage	Operating voltage	Impedance	Voltage levels		Applicable load			
				Must operate voltage	Must release voltage	Rated load voltage	Load voltage	Load current	Inrush current
G3FM-2R5SLN	5 VDC	4 to 6 VDC	250 $\Omega$ ±20%	4 VDC max.	1 VDC min.	24 to 240 VAC	19.2 to 264 VAC	1 to 500 mA	6 A (10 ms)
	12 VDC	9.6 to 14.4 VDC	600 $\Omega$ ±20%	9.6 VDC max.		24 to 110 VDC	19.2 to 125 VDC		
	24 VDC	19.2 to 28.8 VDC	1.2 k $\Omega$ ±20%	19.2 VDC					

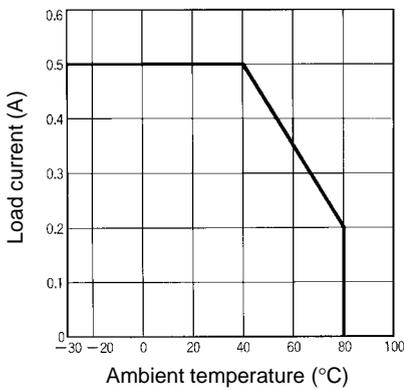
■ Characteristics

Operate time	5 ms max.
Release time	10 ms max.
Output ON voltage drop	3 V (RMS) max.
Leakage current	0.1 mA max.
Insulation resistance	100 MΩ min. (at 500 VDC)
Dielectric strength	1,500 VAC, 50/60 Hz for 1 min
Vibration resistance	10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	1,000 m/s <sup>2</sup>
Ambient temperature	Operating: -30°C to 80°C (with no icing or condensation) Storage: -30°C to 100°C (with no icing or condensation)
Ambient humidity	Operating: 45% to 85%
Weight	Approx. 50 g

Engineering Data

Load Current vs. Ambient Temperature Characteristics

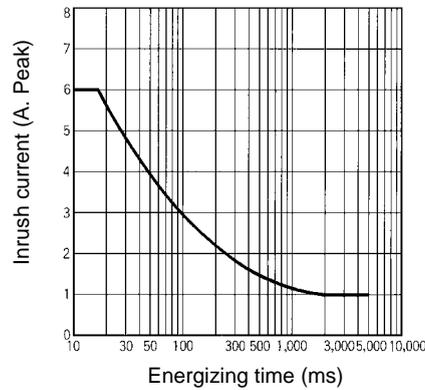
G3FM-2R5SLN



Inrush Current Resistivity

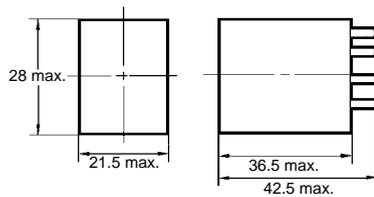
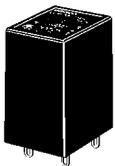
Non-repetitive (Keep the inrush current to half the rated value if it occurs repetitively.)

G3FM-2R5SLN

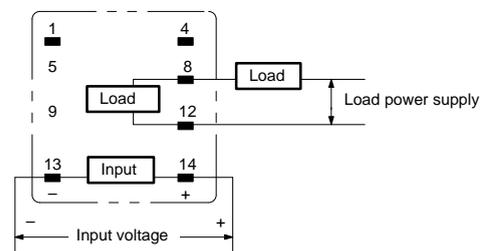


Dimensions

Note: All units are in millimeters unless otherwise indicated.



Terminal Arrangement/ Internal Connections (Bottom View)



## Precautions

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Refer to pages 11 to 19 for general precautions.

The SSR case serves to dissipate heat. Install the relays so that they are adequately ventilated. If poor ventilation is unavoidable, reduce the load current by half.

**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.