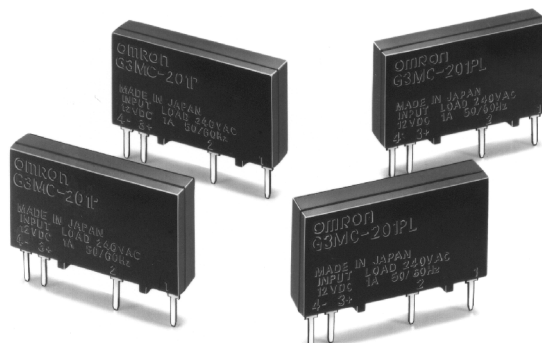


Solid State Relay G3MC

Compact, Low-cost SSR with Reinforced Insulation

- Small bottom surface area (approx. 80% of the conventional G3MB's) and ideal for close PCB mounting.
- DC input and AC output for an applicable load of 1 A at 40°C.
- Compact, thin-profile SSR of monoblock construction with an all-in-one frame incorporates a PCB, terminals, and a heatsink.
- VDE certified models available.



Ordering Information

To Order: Select the part number and add the desired coil voltage rating, (e.g., G3MC-101P-DC12).

Isolation	Zero-cross function	Built-in snubber circuit	Rated output load	Rated input voltage	Part number		
Phototriac	Yes	Yes	1 A at 100 to 120 VAC (75 to 132 VAC)	5 VDC	G3MC-101P		
				12 VDC			
				24 VDC			
	No					5 VDC	G3MC-101PL
						12 VDC	
						24 VDC	
	Yes	Yes	2 A at 100 to 120 VAC (75 to 132 VAC)	5 VDC	G3MC-102P		
				12 VDC			
				24 VDC			
		No				5 VDC	G3MC-102PL
						12 VDC	
						24 VDC	
Yes	Yes	1 A at 100 to 240 VAC (75 to 264 VAC)	5 VDC	G3MC-201P			
			12 VDC				
			24 VDC				
	No				5 VDC	G3MC-201PL	
					12 VDC		
					24 VDC		
Yes	Yes	2 A at 100 to 240 VAC (75 to 264 VAC)	5 VDC	G3MC-202P			
			12 VDC				
			24 VDC				
	No				5 VDC	G3MC-202PL	
					12 VDC		
					24 VDC		

Specifications

■ RATINGS (AMBIENT TEMPERATURE 25°C)

Input

Rated voltage	Operating voltage	Impedance	Voltage levels	
			Must operate voltage	Must dropout voltage
5 VDC	4 to 6 VDC	300Ω ±20%	4 VDC max.	1 VDC min.
12 VDC	9.6 to 14.4 VDC	800Ω ±20%	9.6 VDC max.	
24 VDC	19.2 to 28.8 VDC	1.6kΩ ±20%	19.2 VDC max.	

Note: Each model has 5-VDC, 12-VDC, and 24-VDC input versions.

Output

Part number	Applicable load			
	Rated load voltage	Load voltage range	Load current	Surge current
G3MC-101P(L)	100 to 120 VAC	75 to 132 VAC	0.1 to 1 A	8 A (60 Hz, 1 cycle)
G3MC-201P(L)	100 to 240 VAC	75 to 264 VAC		
G3MC-102P(L)	100 to 120 VAC	75 to 132 VAC	0.1 to 2 A	30 A (60 Hz, 1 cycle)
G3MC-202P(L)	100 to 240 VAC	75 to 264 VAC		

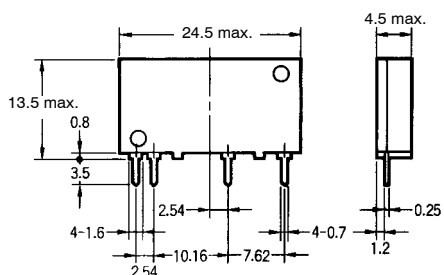
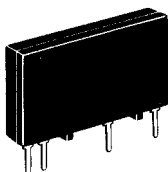
■ CHARACTERISTICS

Item	G3MC-101P / G3MC-102P	G3MC-101PL / G3MC-102PL	G3MC-201P / G3MC-202P	G3MC-201PL / G3MC-202PL
Operate time	1/2 of load power source cycle + 1 ms	1 ms max.	1/2 of load power source cycle + 1 ms	1 ms max.
Release time	1/2 of load power source cycle + 1 ms)			
Output ON voltage drop	1.6 V (RMS) max.			
Leakage current	1 mA max. (at 100 VAC)		1.5 mA max. (at 200 VAC)	
Insulation resistance	1,000 MΩ min. (at 500 VDC)			
Dielectric strength	2,500 VAC, 50/60 Hz for 1 min			
Vibration resistance	Malfunction: 10 to 55 Hz, 0.75-mm double amplitude			
Shock resistance	Malfunction: 1,000 m/s ² (approx. 100G)			
Ambient temperature	Operating: -30°C to 80°C (with no icing or condensation) Storage: -30°C to 100°C (with no icing or condensation)			
Approved standards	UL508 File No. E64562, CSA C22.2 (No. 14, No. 950) File No. LR35535, EN60950 File No. 5925UG			
Ambient humidity	Operating: 45% to 85%			
Weight	Approx. 2.5 g			

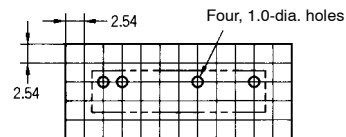
Dimensions

Unit: mm (inch)

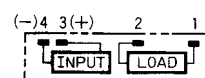
G3MC-101P
G3MC-101PL
G3MC-201P
G3MC-201PL



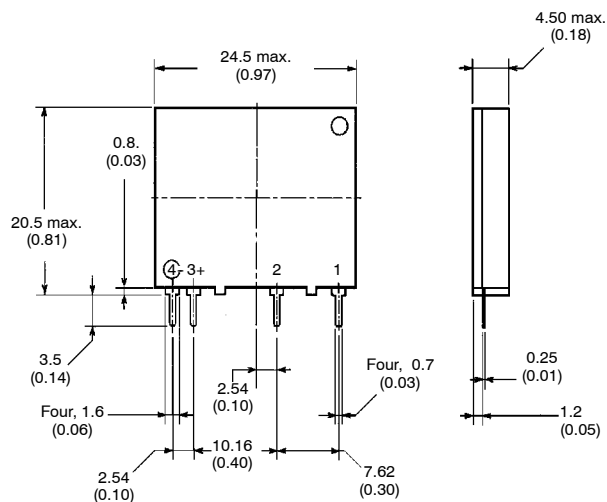
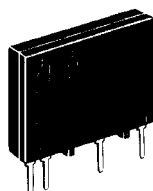
PCB Dimensions
(Bottom View)



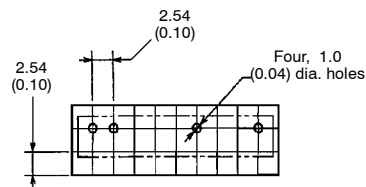
Terminal Arrangement
(Bottom View)



G3MC-102P
G3MC-102PL
G3MC-202P
G3MC-202PL



PCB Dimensions
(Bottom View)



Terminal Arrangement
(Bottom View)

