

Power PCB Relay

G5C

- Miniature 16 W x 22 L x 10.9 H mm (0.63 W x 0.87 L x 0.43 H in)
- Low power consumption (150 mW)
- Flux tight and fully sealed construction
- Long electrical service life
- High switching capacity
- Ideal for switching power supplies on small appliances and output to industrial equipment







Ordering Information.

To Order: Select the part number and add the desired coil voltage rating, (e.g., G5C-1-DC12).

Туре	Contact form	Construction	Part number
Standard	SPST-NO	Semi-sealed	G5C-1
		Sealed	G5C-14
High capacity		Semi-sealed	G5CE-1
High sensitivity		Semi-sealed	G5C-1-H
		Sealed	G5C-14-H
Low sensitivity		Semi-sealed	G5C-1-L
		Sealed	G5C-14-L
PCB+QC		Semi-sealed	G5CE-1-TP

Specifications.

■ CONTACT DATA

Туре	G5C-1-□-□	G5CE-1-□	
Load	Resistive Load (p.f. = 1)		
Rated load	10 A at 250 VAC, 10 A at 30 VDC	15 A at 110 VAC, 10 A at 30 VDC	
Contact material	AgCdO		
Carry current	10 A	15 A	
Max. operating voltage	250 VAC, 125 VDC		
Max. operating current	10 A	15 A	
Max. switching capacity	2,500 VA, 300 W		
Min. permissible load	100 mA at 5 VDC		

■ COIL DATA

Standard type/high capacity

Rated voltage	Rated current	Coil resistance	Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption
(VDC)	(mA)	(Ω)	% of rated voltage		•	(mW)
3	66.70	45	75% max.	10% min.	130%	Approx. 200
5	40.00	125			at 70°C (158°F)	
6	33.30	180				
12	16.70	720			110%	
24	8.30	2,880			at 70°C (158°F)	
48	4.20	11,520			for high capacity	
60	3.30	18,180			type	

High-sensitivity type

Rated voltage	Rated current	Coil resistance	Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption
(VDC)	(mA)	(Ω)	% of rated voltage			(mW)
3	50.00	60	80% max.	10% min.	130%	Approx. 150
5	30.00	166.70			at 70°C (158°F)	
6	25.00	240				
12	12.50	960				
24	6.30	3,810				
48	3.10	15,480				

Low-sensitivity type

Rated voltage	Rated current	Coil resistance	Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption
(VDC)	(mA)	(Ω)	% of rated voltage			(mW)
3	120.00	25	80% max.	10% min.	110%	Approx. 360
5	72.00	69.40			at 70°C (158°F)	
6	60.00	100				
12	30.00	400				
24	15.00	1,600				
48	7.50	6,400				

Note: 1. The rated current and coil resistance are measured at a coil temperature of $23^{\circ}C$ ($73^{\circ}F$) with a tolerance of $\pm 10\%$.

2. The operating characteristics are measured at a coil temperature of 23°C (73°F).

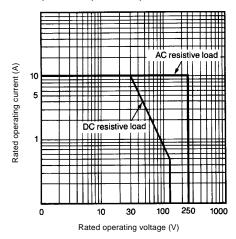
■ CHARACTERISTICS

x. (mean value: 6.70 ms)		
,		
15 ms max. for high sensitivity type (mean value: 7.30 ms)		
10 ms max. (mean value: 0.90 ms)		
5 ms max. (mean value: 0.90 ms)		
erations/hour		
rations/hour		
1,000 MΩ min. (at 500 VDC)		
2,500 VAC, 50/60 Hz for 1 minute between coil and contacts		
5, 50/60 Hz for 1 minute between contacts of same pole		
10 to 55 Hz, 1.50 mm (0.06 in) double amplitude		
z, 1.50 mm (0.06 in) double amplitude		
1,000 m/s ² (approx. 100 G)		
approx. 20 G)		
-25° to 70°C (-13° to 158°F)		
45% to 85% RH		
operations min. (at operating frequency of 18,000 operations/hour)		
acteristic Data"		
Approx. 8 g (0.28 oz)		

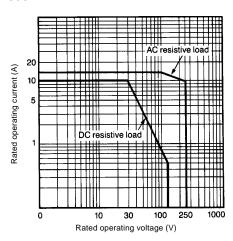
Note: Data shown are of initial value.

■ CHARACTERISTIC DATA

Maximum switching capacity G5C-1, G5C-1-H, G5C-1-L, G5C-14

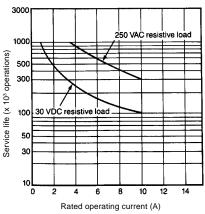


G5CE-1

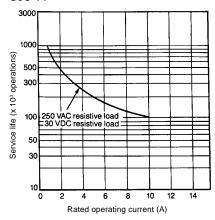


Electrical service life

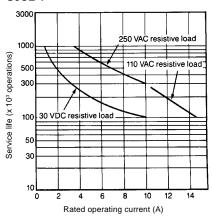
G5C-1, G5C-1-H, G5C-1-L



G5C-14



G5CE-1

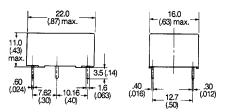


Dimensions.

Unit: mm (inch)

■ RELAYS

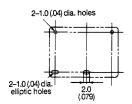
G5C□-1-□



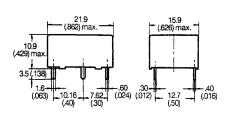
Terminal arrangement/ Internal connections (Bottom view)



Mounting holes (Bottom view)



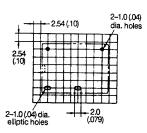
G5C(E)-1



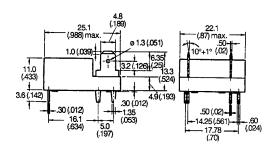
Terminal arrangement/ Internal connections (Bottom view)



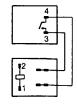
Mounting holes (Bottom view)



G5CE-1-TP

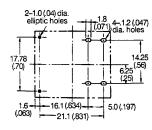


Terminal arrangement/ Internal connections (Top view)



(Bottom view)

Mounting holes (Bottom view)



Note: A tolerance of ± 0.10 mm (0.004 in) applies to all dimensions.

■ APPROVALS

UL (File No. E41515)/CSA (File No. LR31928)

Туре	Contact form	Coil ratings	Contact ratings
G5C-1	SPST-NO	3 to 60 VDC	15 A, 125 VAC (Resistive) 100,000 cycles
G5CE-1			10 A, 250 VAC (Resistive) 100,000 cycles
			15 A, 125 VAC (General Purpose) 100,000 cycles
			10 A, 250 VAC (General Purpose) 100,000 cycles
			10 A, 30 VDC (Resistive) 100,000 cycles

- Note: 1. The rated values approved by each of the safety standards (e.g., UL and CSA) may be different from the performance characteristics individually defined in this catalog.
 - 2. In the interest of product improvement, specifications are subject to change.



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