OMRON

Power PCB Relay — G5P

G5P Relay Is Ideal for TV and Audio Equipment Power Supplies, including a High-Sensitivity Model (Power Consumption: 250mW)

- Meets TV-5 standards required for TV and audio equipment power supplies
- The power consumption of the high-sensitivity model is 50% of the standard model
- High impulse withstand surge of 10,000V
- Double insulation construction assures high insulation capability
- UL, CSA, SEMKO, TUV, and SEV approved

Ordering Information

Type	Contact Form	**Part Number (semi-sealed)**
Standard	SPST-NO	**G5P-1A**
High-sensitivity	SPST-NO	**G5P-1A-H**

■ HOW TO ORDER

G5P-1A-*X*-DC ***add coil rating***

X; none = standard, H = high-sensitivity (power consumption: 250mW)

Specifications

■ CONTACT DATA

Type	Standard/High-Sensitivity
Load	Resistive (p.f. = 1)
Rated load	5A at 250 VAC; 5A at 30 VDC
Contact material	AgSnO
Carry current	5A
Max. operating voltage	250 VAC, 30 VDC
Max. operating current	5A
Max. switching capacity	1,250 VA, 150 W
Min. permissible load	100mA, 5 VDC

■ COIL DATA – Standard

Rated Voltage (VDC)	Rated Current (mA)	Coil Resistance (Ω)	Pickup Voltage	Dropout Voltage	Maximum Voltage	Power Consumption (approx.)
			(- - - - - - - - - - % of rated voltage - - - - - - - - - - - - -)			
5	106	46.9	75% max.	10% min.	110% max.	530mW
6	94.4	64	75% max.	10% min.	110% max.	530mW
9	58.2	152.8	75% max.	10% min.	110% max.	530mW
12	44.2	273	75% max.	10% min.	110% max.	530mW
24	22.8	1,100	75% max.	10% min.	110% max.	530mW
48	11	4,348	75% max.	10% min.	110% max.	530mW

■ COIL DATA – High-Sensitivity

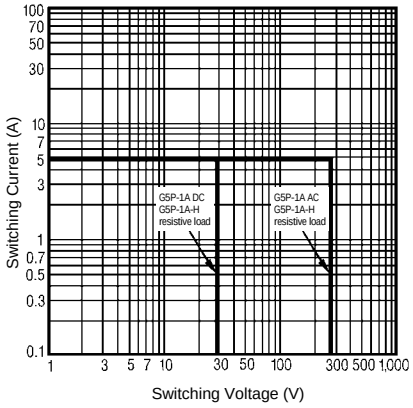
Rated Voltage (VDC)	Rated Current (mA)	Coil Resistance (Ω)	Pickup Voltage	Dropout Voltage	Maximum Voltage	Power Consumption (approx.)
			(- - - - - - - - - - % of rated voltage - - - - - - - - - - - - -)			
5	50	100	75% max.	10% min.	110% max.	250mW
6	41.7	144	75% max.	10% min.	110% max.	250mW
9	27.8	324	75% max.	10% min.	110% max.	250mW
12	20.8	576	75% max.	10% min.	110% max.	250mW
24	10.4	2,304	75% max.	10% min.	110% max.	250mW

■ CHARACTERISTICS

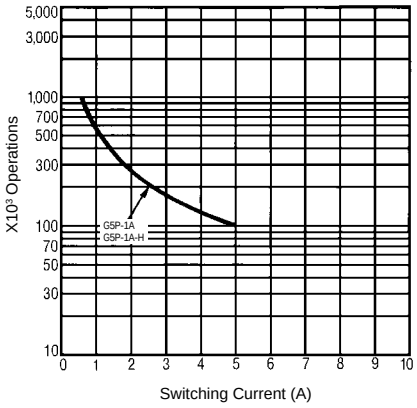
Contact resistance	30 mΩ max.	
Operate time	15 ms max.	
Release time	5 ms max.	
Insulation resistance	1,000 MΩ min. (at 500 VDC)	
Dielectric withstand voltage	4,000 VAC, 50/60 Hz for 1 minute between coil and contact 1,000 VAC, 50/60 Hz for 1 minute between contacts of same polarity	
Impulse withstand voltage	10,000 V, 1.2x50μs between coil and contact	
Vibration resistance	Destruction	10 to 55 Hz, 1.5-mm double amplitude
	Malfunction	10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Destruction	1,000 m/s^2 (approx. 100G)
	Malfunction	200 m/s^2 (approx. 20G)
Life expectancy	Mechanical	2,000,000 operations min. (at 18,000 operations/hr)
	Electrical	100,000 operations min. (at 1,800 operations/hr under rated load)
Ambient temperature	Operating	-40°C to 70°C (with no icing)
Ambient humidity	Operating	45% to 85%
Weight	Approx. 11g	

■ CHARACTERISTIC DATA

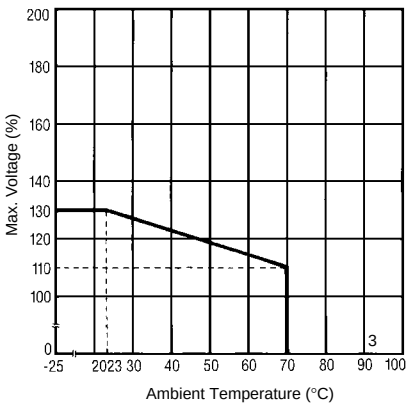
Max. Switching Capacity



Life Expectancy



Ambient Temperature vs. Max. Voltage



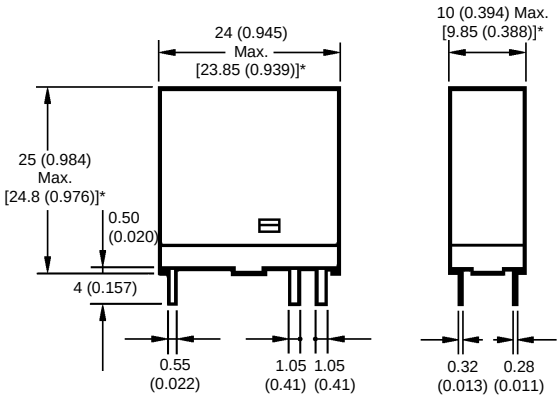
NOTE: The maximum voltage is the permissable peak voltage that can be imposed on the coil The maximum voltage must not be imposed on the coil continuously.

Dimensions

Unit: mm (inch)

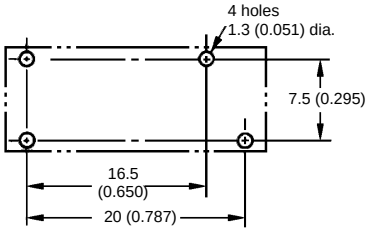
■ SPST-NO TYPE

G5P-1A-___

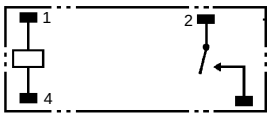


*Average

Mounting Holes
(Bottom view)
Tolerance: ±0.1 mm



Terminal Arrangement/
Internal Connections
(Bottom view)



■ APPROVALS

UL508 (File No. E41643)/CSA C22.2 No. 14 (File No. LR31928)

Model	Contact Form	Coil Ratings	Contact Ratings
G5P-1A G5P-1A-H	SPST-NO	5 to 48 VDC	5A, 277 VAC, general use 5A, 30 VDC, resistive TV-5 rating

Note: 1. The rated values approved by each of the safety standards (e.g., UL, 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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Cat. No. GC RLY6 9/97 Specifications subject to change without notice. Printed in the U.S.A.