

Low Signal Relay

- Capable of switching loads up to 2 A
- Conforms to FCC part 68 1500 V surge withstand
- Reliable bifurcated crossbar contacts
- Fully-sealed construction

Ordering Information_____



To Order: Select the part number and add the desired coil voltage rating (e.g., G5V-2-DC12).

Туре	Contact form	Construction	Part number
Standard	DPDT	Fully-sealed	G5V-2
High-sensitivity			G5V-2-H
Ultra-sensitive			G5V-2-H1

Specifications.

CONTACT DATA

Load	Resistive load (p.f. = 1)
Rated load	0.50 A at 125 VAC 2 A at 30 VDC
Contact material	Ag (Au clad)
Carry current	2 A
Max. operating voltage	125 VAC 125 VDC
Max. operating current	2 A
Max. switching capacity	62.50 VA 60W
Min. permissible load	10 μA, 10 mVDC



(SP)

77

COIL DATA

Standard type

Rated Rated voltage current			Coil inductance (Ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption
(VDC) (mA)	(Ω)	Armature OFF	Armature ON	% of rated voltage			(mW)	
3	166.70	18	0.04	0.05	75% max.	% max. 5% min.	120% max. at 65°C (149°F)	Approx. 500
5	100	50	0.09	0.11				
6	83.30	72	0.16	0.19				
9	55.60	162	0.31	0.49				
12	41.70	288	0.47	0.74				
24	20.80	1,152	1.98	2.68				
48	12	4,000	_	_			110% max. at 60°C (140°F)	Approx. 580

High-sensitivity type

Rated voltage	ge current resistance		Coil inductance (Ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption
(VDC) (mA)		(Ω)	Armature OFF	Armature ON	% of rated voltage			(mW)
3	120	25	0.04	0.07	75% max.	5% min.	120% max.	Approx. 360
5	72	70	0.12	0.19			at 70°C	
6	60	100	0.18	0.29			(158°F)	
9	40	225	0.40	0.62				
12	30	400	0.75	1.18				
24	15	1,600	3.16	4.81				

Ultra-sensitive type

Rated voltage	tage current resistance		Coil inductance (Ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption
(VDC)	(mA)	(Ω)	Armature OFF	Armature ON	% of rated	voltage		(mW)
3	50	60	0.18	0.26	75% max.	5% min.	150% max.	Approx. 150
5	30	166.70	0.46	0.71			at 70°C	
6	25	240	0.70	0.97			(158°F)	
9	16.70	540	1.67	2.33				
12	12.50	960	2.90	3.99				
24	8.30	2,880	6.72	9.27				Approx. 200
48	6.25	7,680	20.10	26.70				Approx. 300

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

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

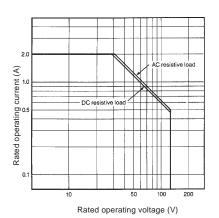
■ CHARACTERISTICS

	50 mΩ max. G5V-2, G5V-2-H, 100 mΩ max. G5V-2-H1			
	7 ms max. (mean value: approx. 3.5 ms)			
	3 ms max. (mean value: approx. 0.8 ms)			
Operate	Mean value: approx. 0.5 ms			
Release	Mean value: approx. 3.5 ms			
Mechanical	36,000 operations/hour			
Electrical	1,800 operations/hour (under rated load)			
	1,000 MΩ min (at 500 VDC)			
	1,000 VAC, 50/60 Hz for 1 minute between coil and contacts 1,000 VAC, 50/60 Hz for 1 minute between contacts of different poles 750 VAC, 50/60 Hz for 1 minute between contacts of same poles (500 VAC, 50/60 Hz for 1 minute between contacts of same poles for ultra-sensitive type)			
е	1,500 V 10 X 160 µs (conforms to part 68 of FCC rules)			
Mechanical durability	10 to 55 Hz, 1.50 mm (0.59 in) double amplitude			
Malfunction durability				
Mechanical durability	1,000 m/s² (approx. 100 G)			
Malfunction durability	200 m/s² (approx. 20 G)			
Operating/storage	-25° to 70°C (-13° to 158°F)			
	35% to 85% RH			
Mechanical	15 million operations min. (at operating frequency of 36,000 operations/hour)			
Electrical	See "Characteristic Data"			
·	6 g (0.21 oz)			
	Release Mechanical Electrical e Mechanical durability Malfunction durability Malfunction durability Malfunction durability Operating/storage Mechanical			

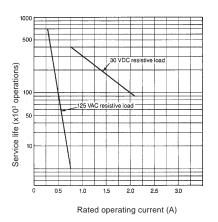
Note: Data shown are of initial value.

■ CHARACTERISTIC DATA

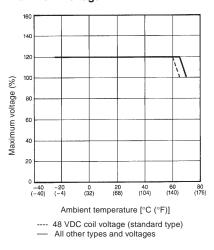
Maximum switching capacity



Electrical service life



Ambient temperature vs. maximum voltage

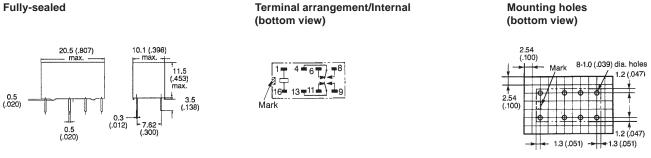


Dimensions.

Unit: mm (inch)

RELAYS

Fully-sealed



Note: 1. ####and [__] indicate mounting orientation marks. 2. A tolerance of ± 0.10 (0.004) applies to the above dimensions.

APPROVALS

UL (File No. E41515)/CSA (File No. LR24825)

Туре	Contact form	Coil rating	Contact ratings
G5V-2	DPDT	3 to 48 VDC	0.6 A, 125 VAC
G5V-2-H		3 to 24 VDC	0.6 A,110 VDC
			2.0 A, 30 VDC
G5V-2-H1		3 to 48 VDC	0.6 A, 125 VAC
			0.6 A, 110 VDC
			1.0 A, 24 VDC

Note: 1. The rated values approved by each of the safety standards 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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