

■ Ratings

● Coil

Classification	Rated voltage	Rated current (mA)	Coil resistance (Ω)	Must operate voltage (V)	Must release voltage (V)	Max. voltage (V)	Power consumption (mW)
Standard	3 VDC	166.7	18	75% max.	5% min.	120% (at 23°C)	Approx. 500
	5 VDC	100	50				
	6 VDC	83.3	72				
	9 VDC	55.6	162				
	12 VDC	41.7	288				
	24 VDC	20.8	1,152				
High-sensitivity	48 VDC	12	4,000	75% max.	5% min.	180% (at 23°C)	Approx. 580
	5 VDC	30	166.7				Approx. 150
	12 VDC	12.5	960				Approx. 200
	24 VDC	8.33	2,880				Approx. 300
	48 VDC	6.25	7,680			150% (at 23°C)	

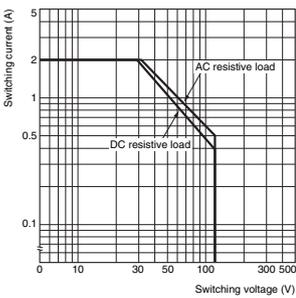
Note 1. The rated current and coil resistance are measured at a coil temperature of 23°C with a tolerance of ±10%.
 2. Operating characteristics are measured at a coil temperature of 23°C.
 3. The maximum voltage is the highest voltage that can be imposed on the relay coil.

● Contacts

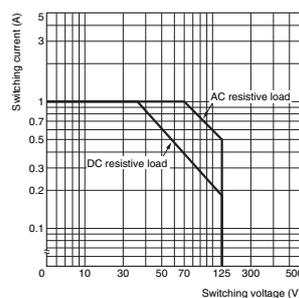
Classification	Standard	High-sensitivity
	Resistive load	
Contact type	Bifurcated crossbar	
Contact material	Ag + Au-alloy	
Rated load	0.5 A at 125 VAC; 2 A at 30 VDC	0.5 A at 125 VAC; 1 A at 24 VDC
Rated carry current	2 A	
Max. switching voltage	125 VAC, 125 VDC	
Max. switching current	2 A	1 A

■ Engineering Data

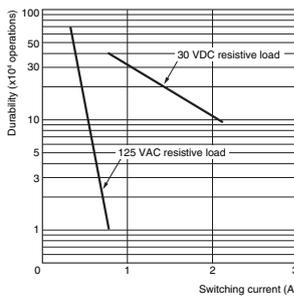
● Maximum Switching Capacity Standard/G5V-2



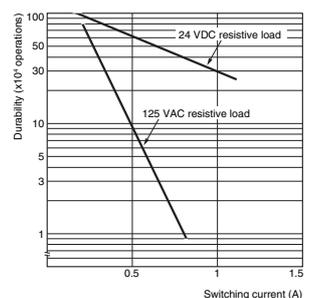
High-sensitivity/G5V-2-H1



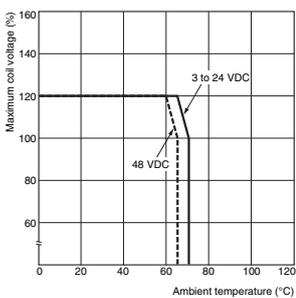
● Durability Standard/G5V-2



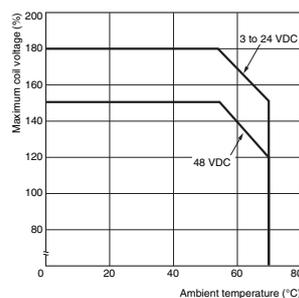
High-sensitivity/G5V-2-H1



● Ambient Temperature vs. Maximum Coil Voltage Standard/G5V-2

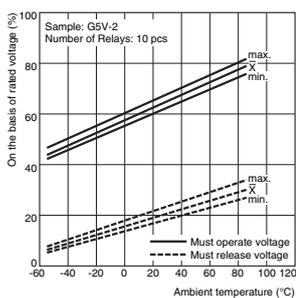


High-sensitivity/G5V-2-H1

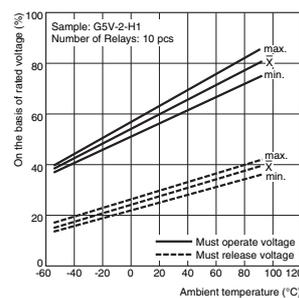


Note: The maximum coil voltage refers to the maximum value in a varying range of operating power voltage, not a continuous voltage.

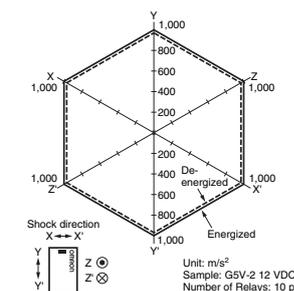
● Ambient Temperature vs. Must Operate or Must Release Voltage Standard/G5V-2



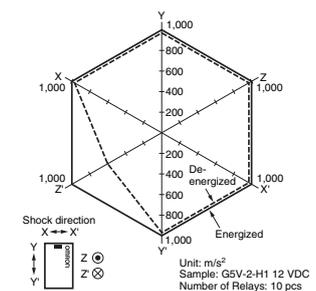
High-sensitivity/G5V-2-H1



● Shock Malfunction Standard/G5V-2

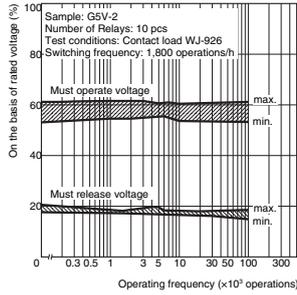


High-sensitivity/G5V-2-H1

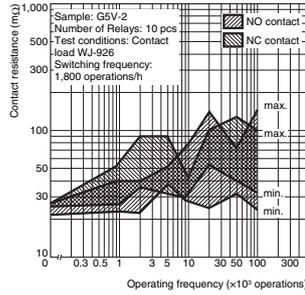


Conditions: Shock is applied in ±X, ±Y, and ±Z directions three times each with and without energizing the Relays to check the number of contact malfunctions.

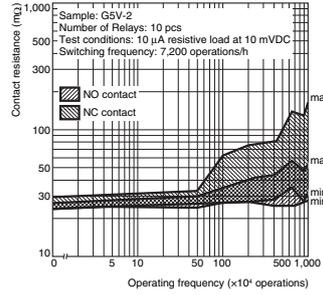
●Dial Pulse Test (with Must Operate and Must Release Voltage) *1 Standard/G5V-2



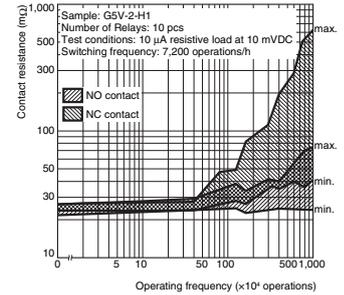
●Dial Pulse Test (Contact Resistance) *1



●Contact Reliability Test *1, *2 Standard/G5V-2



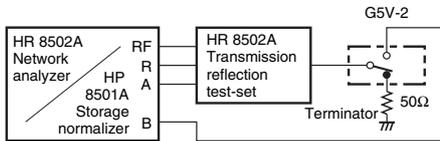
High-sensitivity/G5V-2-H1



- *1. The tests were conducted at an ambient temperature of 23°C.
- *2. The contact resistance data are periodically measured reference values and are not values from each monitoring operation. Contact resistance values will vary according to the switching frequency and operating environment, so be sure to check operation under the actual operating conditions before use.

●High-frequency Characteristics

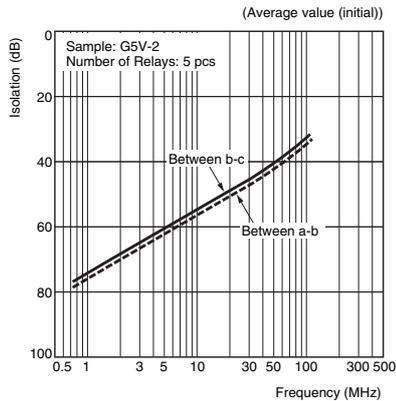
• Measurement Conditions



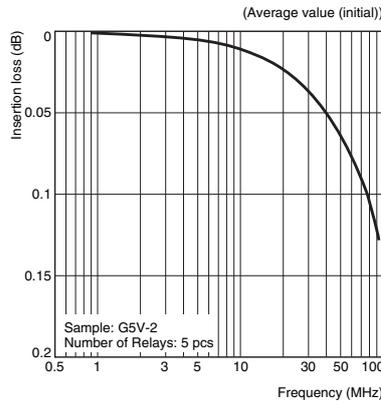
Terminals which were not being measured were terminated with 50 Ω .
Measuring impedance: 50 Ω

Note: The high-frequency characteristics data were measured using a dedicated circuit board and actual values will vary depending on the usage conditions. Check the characteristics of the actual equipment being used.

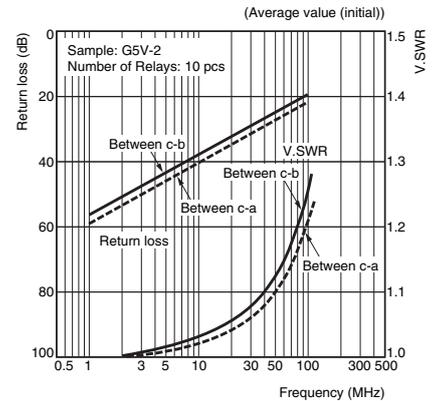
●High-frequency Characteristics (Isolation) *1, *2



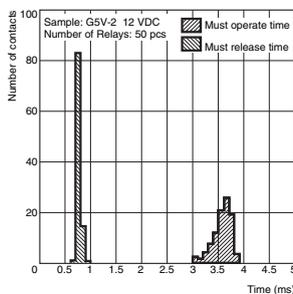
●High-frequency Characteristics (Insertion Loss) *1, *2



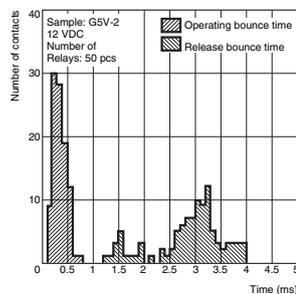
●High-frequency Characteristics (Return Loss, V.SWR) *1, *2



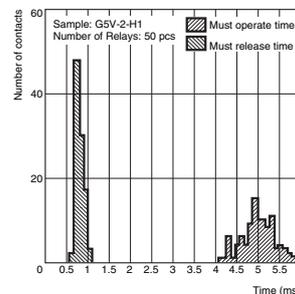
●Must Operate and Must Release Time Distribution *1 Standard/G5V-2



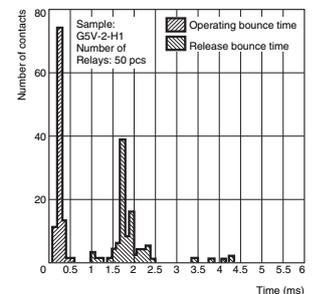
●Distribution of Bounce Time *1



●Must Operate and Must Release Time Distribution *1 High-sensitivity/G5V-2-H1



●Distribution of Bounce Time *1



- *1. The tests were conducted at an ambient temperature of 23°C.
- *2. High-frequency characteristics depend on the PCB to which the Relay is mounted. Always check these characteristics, including endurance, in the actual machine before use.

