

G5Y-1

Features

- Fully-sealed relay with excellent high-frequency characteristics
- Miniature 9.0 mm (.354 in.) H x 11.5 mm (.453 in.) W x 20.5 mm (.807 in.) L
- Shield plate and resin-molded relay base provide excellent high-frequency characteristics: isolation of 68dB (typ.), insertion loss of 0.20dB (typ.), and VSWR of 1.30 (typ.) at 900MHz
- Ultrasmall and lightweight with pickup coil power of 170mW (110mW for high-sensitivity type)
- High shock resistance

Contact Data

Contact ratings 24 VAC, 0.01 A; 24 VDC, 0.01 A, 1 W at 900MHz*

Contact material Au clad Cu alloy

Carry current 0.1 A

Maximum operating voltage 30 VAC, 30 VDC

Maximum operating current 0.1 A

Maximum switching capacity 1 VA, 1 W

Minimum permissible load 10µA, 10mVDC

Coil Data (% of rated voltage)

Pickup voltage 75% max.

Droopout voltage 10% min.

Maximum voltage 150% at 3°C max.

Characteristic Data

Initial contact resistance 100mΩ max.

Operate time 10ms max.

Release time 5ms max.

Insulation resistance 100MΩ min. (at 500 VDC)

Dielectric strength

Between contacts: 500 VAC, 50/60 Hz for 1 minute

Between coil and contacts: 1,000 VAC, 50/60 Hz for 1 minute

Between contacts and ground: 500 VAC, 50/60 Hz for 1 minute

Ambient temperature -25° to 60°C

Service life

Mechanical: 1,000,000 operations min.

(at operating frequency of 1,800 operations/hour)

Electrical: 300,000 operations min. at 0.01 A, 24 VDC

High-Frequency Characteristic Data

Isolation

250MHz: 70dB min.

900MHz: 60dB min.

Insertion loss 0.5dB max.

VSWR

250MHz: 1.5 max.

900MHz: 1.8 max.

Carry power 10 W max.

Construction Data

Termination PCB terminals

Construction Fully-sealed

Weight .212 oz (6 g)

Packaging method Tubes

Note: 1. *Denotes the value at VSWR ≤ 1.2.

2. Line impedance (Z0) of the measuring instrument is 50Ω.

Low Signal Relay



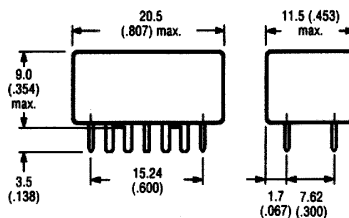
7 RELAYS

Ordering Information

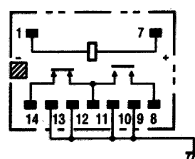
Part number	Rated voltage (V)	Coil res. (Ohms)	Power (mW)	Contact form	Type
G5Y-1 -DC5	5 DC	83	300	SPDT	Non-Latching
-DC12	12 DC	480	300	SPDT	Sealed
-DC24	24 DC	1,920	300	SPDT	Sealed
G5Y-1-H-DC5	5 DC	125	200	SPDT	Non-Latching
-DC12	12 DC	720	200	SPDT	High-Sensitivity
-DC24	24 DC	2,800	200	SPDT	Sealed

Note: 1. Also available in 2-pole versions.

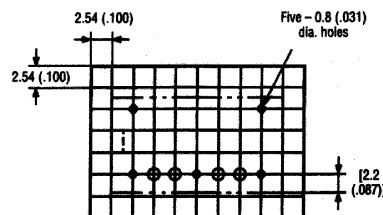
Dimensions [Unit: mm (inch)]



Terminal arrangement/ Internal connections (bottom view)



Mounting holes (bottom view)



Note: 1. ■ and □ indicate mounting orientation marks.