

OMRON Frequency Relays



This product is RoHS compliant.

OMRON
ELECTRONIC COMPONENTS

OMRON G6Y SERIES: 900MHZ SPDT HIGH-FREQUENCY RELAYS

Specifications:

- Insertion loss: 0.5dB max. @ 900MHz
- Max. carry power: 10W
- Power consumption: 200mW
- Contact rating: .5A

Features:

- Ideal for cable TV, HDTV, cellular, satellite communications, VCRs
- Fully sealed construction
- Form, fit, and function replacement to G5Y relay with improved characteristics

For quantities greater than listed, call for quote.

| MOUSER STOCK NO. | Omron Part No. | Fig. | Rated Coil Current (mA) | Coil Resistance (Ω) | Coil Voltage (VDC) | Price Each | | | |
|------------------|----------------|------|-------------------------|---------------------|--------------------|------------|------|------|------|
| | | | | | | 1 | 25 | 50 | 100 |
| 653-G6Y-1-DC5 | G6Y-1-DC5 | A1 | 40.0 | 125 | 5 | 3.41 | 3.20 | 3.03 | 2.87 |
| 653-G6Y-1-DC9 | G6Y-1-DC9 | A1 | 22.2 | 405 | 9 | 3.92 | 3.01 | 2.81 | 2.63 |
| 653-G6Y-1-DC12 | G6Y-1-DC12 | A1 | 16.7 | 720 | 12 | 3.61 | 3.21 | 3.12 | 2.88 |
| 653-G6Y-1-DC24 | G6Y-1-DC24 | A1 | 8.3 | 2880 | 24 | 3.89 | 3.78 | 3.36 | 3.02 |

OMRON G6K-RF SERIES: DPDT COMPACT HIGH-FREQUENCY RELAYS

Specifications:

- Insertion loss: 0.2dB max. @ 1GHz
0.6dB max. @ 3GHz
- Max. transmission capacity: 3W
- Rated power consumption: 100mW

Features:

- Ideal for instrumentation and high-speed LAN network equipment
- Gull-wing surface mount terminals
- Handles 1A, 30VDC and 1W @ 1GHz high frequency load



For quantities greater than listed, call for quote.

| MOUSER STOCK NO. | Omron Part No. | Fig. | Ground Terminal Footprint (mm) | Rated Current (mA) | Coil Resistance (Ω) | Coil Voltage (VDC) | Price Each | | | |
|--|-------------------|------|--------------------------------|--------------------|---------------------|--------------------|------------|-------|-------|-------|
| | | | | | | | 1 | 10 | 25 | 50 |
| Non-Latching with Standard Ground Terminals, 1GHz | | | | | | | | | | |
| 653-G6K-2F-RF-DC3 | G6K-2F-RF-DC3 | B2 | 12.8 | 33.0 | 91 | 3 | 16.36 | 15.47 | 14.67 | 14.18 |
| 653-G6K-2F-RF-DC4.5 | G6K-2F-RF-DC4.5 | B2 | 12.8 | 23.2 | 194 | 4.5 | 17.76 | 16.80 | 15.93 | 15.39 |
| 653-G6K-2F-RF-DC5 | G6K-2F-RF-DC5 | B2 | 12.8 | 21.1 | 237 | 5 | 17.76 | 16.78 | 15.92 | 15.39 |
| 653-G6K-2F-RFDC6 | G6K-2F-RF-DC6 | B2 | 12.8 | 17.6 | 341 | 6 | 22.32 | 20.09 | 17.86 | 16.07 |
| 653-G6K-2F-RF-DC12 | G6K-2F-RF-DC12 | B2 | 12.8 | 9.1 | 1315 | 12 | 23.77 | 22.88 | 21.39 | 19.01 |
| Non-Latching with Space-Saving Ground Terminals, 1GHz | | | | | | | | | | |
| 653-G6K2FRFSDC3 | G6K-2F-RF-S-DC3 | B2 | 10.7 | 33.0 | 91 | 3 | 14.83 | 13.78 | 13.07 | 12.60 |
| 653-G6K2FRFSD4.5 | G6K-2F-RF-S-DC4.5 | B2 | 10.7 | 23.2 | 194 | 4.5 | 14.83 | 13.78 | 13.34 | 11.65 |
| 653-G6K2FRFSD5 | G6K-2F-RF-S-DC5 | B2 | 10.7 | 21.1 | 237 | 5 | 14.83 | 13.78 | 13.34 | 12.60 |
| 653-G6K2FRFSDC12 | G6K-2F-RF-S-DC12 | B2 | 10.7 | 9.1 | 1315 | 12 | 13.66 | 12.69 | 12.04 | 11.61 |
| 653-G6K2FRFSDC24 | G6K-2F-RF-S-DC24 | B2 | 10.7 | 4.6 | 5220 | 24 | 17.38 | 15.64 | 13.90 | 12.51 |
| Non-Latching with Space-Saving Ground Terminals, 3GHz | | | | | | | | | | |
| 653-G6K-2F-RF-TDC3 | G6K-2F-RF-T DC3 | B2 | 10.7 | 33.0 | 91 | 3 | 31.22 | 29.03 | 26.54 | 24.04 |
| 653-G6K-2F-RF-TDC4.5 | G6K-2F-RF-T DC4.5 | B2 | 10.7 | 23.2 | 194 | 4.5 | 31.22 | 29.03 | 26.54 | 24.04 |
| 653-G6K-2F-RF-TDC5 | G6K-2F-RF-T DC5 | B2 | 10.7 | 21.1 | 237 | 5 | 31.22 | 29.03 | 26.54 | 24.04 |
| 653-G6K-2F-RF-TDC12 | G6K-2F-RF-T DC12 | B2 | 10.7 | 9.1 | 1315 | 12 | 31.84 | 29.61 | 27.06 | 24.52 |

OMRON G6Z SERIES: 2.6GHZ SPDT HIGH-FREQUENCY RELAYS

Specifications:

- Insertion loss: 50Ω - 0.3dB @ 2.6GHz;
75Ω - 0.5dB @ 2.6GHz
- Power consumption: 200mW
- Rated carry current: 0.5A
- Isolation: E-shape 30dB min. @ 2.6GHz
Y-shape 40dB min. @ 2.6GHz
- Terminals: G6Z-1F Surface mount
G6Z-1P PCB through-hole

Features:

- Non-latching
- Fully sealed construction
- Triplate micro stripline technology assures superior high-frequency characteristics

Packaged in tubes of 25 pcs.
Also available on tape and reel.
Contact Mouser for these options.

* Reverse contact arrangement

For quantities greater than listed, call for quote.

| MOUSER STOCK NO. | Omron Part No. | Fig. | Rated Coil Current (mA) | Coil Resistance (Ω) | Coil Voltage (VDC) | Price Each | | | | |
|---|-----------------|------|-------------------------|---------------------|--------------------|------------|-------|------|------|--|
| | | | | | | 1 | 25 | 50 | 100 | |
| E-Shape Terminals, 50Ω Impedance | | | | | | | | | | |
| 653-G6Z-1FE-A-DC3 | G6Z-1FE-A-DC3 | C3 | 66.7 | 45 | 3 | 4.44 | 4.39 | 4.35 | 4.01 | |
| 653-G6Z-1FE-A-DC4.5 | G6Z-1FE-A-DC4.5 | C3 | 44.4 | 101 | 4.5 | 6.38 | 5.94 | 5.68 | 5.43 | |
| 653-G6Z-1FE-A-DC5 | G6Z-1FE-A-DC5 | C3 | 40.0 | 125 | 5 | 5.79 | 5.43 | 5.18 | 4.95 | |
| * 653-G6Z1FEARDCSBYOMZ | G6Z-1FE-AR-DC5 | C3 | 40.0 | 125 | 5 | 11.13 | 10.01 | 9.47 | 8.90 | |
| 653-G6Z-1FE-A-DC12 | G6Z-1FE-A-DC12 | C3 | 16.7 | 720 | 12 | 5.74 | 5.39 | 5.12 | 3.90 | |
| 653-G6Z-1PE-ADC5 | G6Z-1PE-A DC5 | D1 | 40.0 | 125 | 5 | 6.56 | 6.38 | 6.19 | 6.00 | |
| 653-G6Z-1PE-A-DC12 | G6Z-1PE-A-DC12 | D1 | 16.7 | 720 | 12 | 8.43 | 6.94 | 6.19 | 5.70 | |
| E-Shape Terminals, 75Ω Impedance | | | | | | | | | | |
| 653-G6Z-1FE-DC5 | G6Z-1FE-DC5 | C3 | 40.0 | 125 | 5 | 5.86 | 5.68 | 5.16 | 4.85 | |
| 653-G6Z-1FE-DC24 | G6Z-1FE-DC24 | C3 | 8.3 | 2880 | 24 | 4.29 | 4.23 | 4.20 | 3.64 | |
| 653-G6Z-1PE-DC5 | G6Z-1PE-DC5 | D1 | 40.0 | 125 | 5 | 6.40 | 5.75 | 5.10 | 4.59 | |
| 653-G6Z-1PE-DC12 | G6Z-1PE-DC12 | D1 | 16.7 | 720 | 12 | 5.60 | 5.26 | 5.02 | 4.54 | |
| 653-G6Z-1PE-DC24 | G6Z-1PE-DC24 | D1 | 8.3 | 2880 | 24 | 5.27 | 4.72 | 4.34 | 3.58 | |
| Y-Shape Terminals, 50Ω Impedance | | | | | | | | | | |
| 653-G6Z-1F-A-DC4.5 | G6Z-1F-A-DC4.5 | C4 | 44.4 | 101 | 4.5 | 6.54 | 5.84 | 5.38 | 4.45 | |
| 653-G6Z-1F-A-DC5 | G6Z-1F-A-DC5 | C4 | 40.0 | 125 | 5 | 6.36 | 5.68 | 5.23 | 4.80 | |
| 653-G6Z-1F-A-DC9 | G6Z-1F-A-DC9 | C4 | 22.2 | 405 | 9 | 6.34 | 5.67 | 5.21 | 4.32 | |
| 653-G6Z-1F-A-DC12 | G6Z-1F-A-DC12 | C4 | 16.7 | 720 | 12 | 5.86 | 5.47 | 5.16 | 4.82 | |
| 653-G6Z-1F-A-DC24 | G6Z-1F-A-DC24 | C4 | 8.3 | 2880 | 24 | 8.90 | 7.63 | 6.84 | 6.35 | |
| 653-G6Z-1P-ADC9 | G6Z-1P-A DC9 | D5 | 22.2 | 405 | 9 | 6.18 | 6.01 | 5.83 | 5.66 | |
| Y-Shape Terminals, 75Ω Impedance | | | | | | | | | | |
| 653-G6Z-1F-DC5 | G6Z-1F-DC5 | C4 | 40.0 | 125 | 5 | 6.69 | 6.02 | 5.35 | 4.54 | |
| 653-G6Z-1F-DC12 | G6Z-1F-DC12 | C4 | 16.7 | 720 | 12 | 6.95 | 6.25 | 5.56 | 5.00 | |
| 653-G6Z-1P-DC3 | G6Z-1P-DC3 | D5 | 66.7 | 45 | 3 | 5.41 | 4.82 | 4.44 | 3.68 | |
| 653-G6Z-1P-DC4.5 | G6Z-1P-DC4.5 | D5 | 44.4 | 101 | 4.5 | 5.57 | 4.97 | 4.58 | 3.80 | |
| 653-G6Z-1P-DC12 | G6Z-1P-DC12 | D5 | 16.7 | 720 | 12 | 5.41 | 4.82 | 4.44 | 3.68 | |

Meet the growing demand for wireless communication with Omron's new RF relays. The G6K-RF, G6Z, G6Y, and G6W are the smallest relays of their type on the market!

Features:

- Low power consumption
- Good isolation characteristics

Applications:

- Wireless infrastructure equipment
- Filter and duplex switching
- Antenna switching
- Amplifiers

DIMENSIONS: mm

A

B

C

D

TERMINAL ARRANGEMENT

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