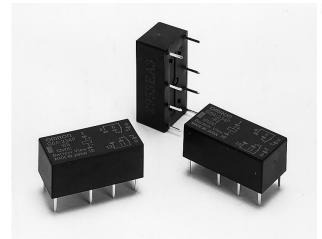
OMRON

BABT Approved Relay

G6A-BS

BABT Approved Relay Meeting the Requirements of EN41003:1993 as endorsed, formerly BS6301:1989 Amendment 5 for Supplementary Isolation

- BABT Approved No. CR/0098.
- Height of only 8mm from PCB.
- Wide switching load 10µA to 2A.
- Fully sealed construction.



Ordering Information

Single-side Stable Type

| Model | Classification | | | | |
|-------------|---------------------|------------------------------------|------------------------------------|----------------------------|--|
| G6A-234P-BS | Contact Form – DPDT | Contact Type – Bifurcated crossbar | Contact Material – AgPd+Au clad | Structure – Plastic sealed | |

Note: When ordering, add the rated coil voltage to the model number.

Example: G6A-234P-BS 12 VDC

Rated coil voltage

Specifications

■ Coil Ratings

General purpose, DPDT Relays

| Rated voltage (VDC) | | 3 | 4.5 | 5 | 6 | 9 | 12 | 24 | 48 |
|----------------------|--------------|---|------|------|------|------|------|-------------------|-------|
| Rated current (mA) | | 93.8 | 62.5 | 56.2 | 46.5 | 31.1 | 23.3 | 11.7 | 7.0 |
| Coil resistance (Ω) | | 32 | 72 | 89 | 129 | 289 | 514 | 2,057 | 6,882 |
| Coil inductance | Armature OFF | 0.07 | 0.16 | 0.2 | 0.29 | 0.63 | 1.1 | 4.5 | 13.7 |
| (H) (ref. value) | Armature ON | 0.065 | 0.14 | 0.18 | 0.26 | 0.57 | 1.06 | 4.1 | 12.5 |
| Must operate voltage | | 70% max. of rated voltage | | | | | | | |
| Must release voltage | | 10% min. of rated voltage | | | | | | | |
| Max. voltage | | 150% of rated voltage at 23°C, 150% at 70°C | | | | | | | |
| Power consumption | | Approx. 280 mW | | | | | | Approx. 330 mW | |

■ Contact Ratings

| Item | G6A-234P-BS | | | |
|-------------------------|------------------------------------|--|--|--|
| Load | Resistive load (cos∅ = 1) | Inductive load $(\cos\emptyset = 0.4; L/R = 7 ms)$ | | |
| Rated load | 0.3 A at 125 VAC; 1 A at 30 VDC | 0.2 A at 125 VAC; 0.5 A at 30 VDC | | |
| Contact material | AgPd (Au-clad) | | | |
| Rated carry current | 3 A | | | |
| Max. switching voltage | 250 VAC, 220 VDC | | | |
| Max. switching current | DC: 2A; AC: 2 A | DC: 1 A; AC: 1 A | | |
| Max. switching capacity | 125 VA, 60 W | 62.5 VA, 30 W | | |
| Min. permissible load | 0.01 mA at 10 mVDC | | | |

BABT

■ Characteristics (at Ambient Temperature 23°C)

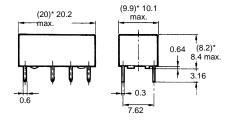
| Contact resistance | 50 mΩ max. |
|------------------------------|--|
| Operate (set) time | 5 ms max. |
| Release (reset) time | 3 ms max. |
| Max. operating frequency | Mechanical: 36,000 operations/hr Electrical: 1,800 operations/hr (under rated load) |
| Insulation resistance | 1,000 MΩ min. (at 500 VDC) |
| Dielectric withstand voltage | 1,000 VAC, 50/60 Hz for 1 min between open contacts 2,000 VAC, 50/60 Hz for 1 min between coil and contacts |
| Impulse withstand voltage | 1,500 V 10 x 160 μs (conforms to FCC Part 68) |
| Vibration resistance | Destruction: 10 to 55 Hz, 5-mm double amplitude Malfunction: 10 to 55 Hz, 3.3-mm double amplitude |
| Shock resistance | Destruction: 1,000 m/s² (approx. 100G) Malfunction: DPDT: 500 m/s² (approx. 50G) |
| Life expectancy 4U.com | Mechanical: 100,000,000 operations min. (at 36,000 operations/hr) Electrical: 500,000 operations min. (at 1,800 operations/hr) |
| Ambient temperature | Operating: -40°C to 70°C (with no icing) Storage: -40°C to 70°C (with no icing) |
| Ambient humidity | Operating: 45% to 85% |
| Weight | DPDT: Approx. 3.5 g |

Note: The data shown above are initial values.

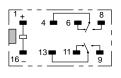
Dimensions

Note: 1. Orientation marks are indicated as follows:

G6A-234P-BS



Terminal Arrangement/ Internal Connections (Bottom View)



Mounting Holes (Bottom View)



