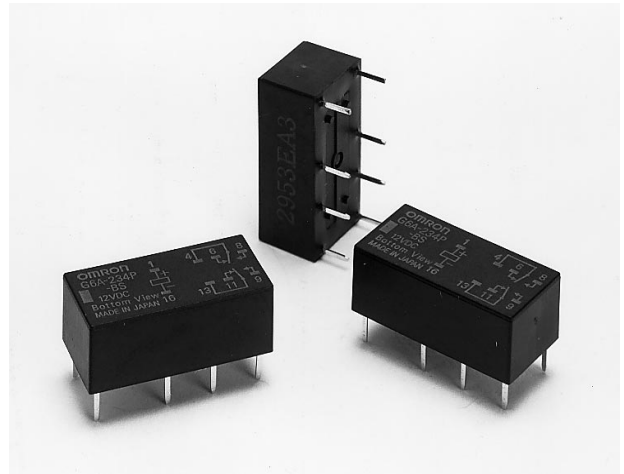


## BABT Approved Relay

## 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 – 10 $\mu$ A to 2A.
- Fully sealed construction.



BABT

## 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 ( $\Omega$ )     | 32  | 72    | 89   | 129  | 289  | 514  | 2,057 | 6,882          |      |
| Coil inductance (H) (ref. value) | Armature OFF                                | 0.07  | 0.16 | 0.2  | 0.29 | 0.63 | 1.1   | 4.5            | 13.7 |
|                                  | 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 $\phi$ = 1)    | Inductive load (cos $\phi$ = 0.4; L/R = 7 ms) |
| Rated load              | 0.3 A at 125 VAC;<br>1 A at 30 VDC | 0.2 A at 125 VAC;<br>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                 |   |

## ■ Characteristics (at Ambient Temperature 23°C)

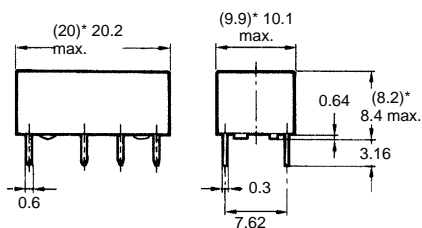
|                                     |   |
|-------------------------------------|---|
| <b>Contact resistance</b>           | 50 mΩ max.  |
| <b>Operate (set) time</b>           | 5 ms max.   |
| <b>Release (reset) time</b>         | 3 ms max.   |
| <b>Max. operating frequency</b>     | Mechanical: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

**Note:** The data shown above are initial values.

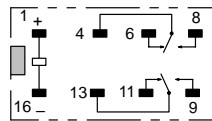
## Dimensions

**Note:** 1. Orientation marks are indicated as follows:  

### G6A-234P-BS



### Terminal Arrangement/ Internal Connections (Bottom View)



### Mounting Holes (Bottom View)

Tolerance: +0.1

