imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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General Purpose Relay

- Miniature relay ideal for switching motor load, lamp load, heater, etc.
- Creepage distance of more than 2.03 mm (0.08 in).
- Upper mounting bracket type for easy wiring and mounting



Ordering Information _____

To Order: Select the part number from the available types chart and add the desired coil voltage rating, (e.g., G4B-112T-US-DC6).

| Туре | Load contact terminal | Coil terminal | Contact form | Part number |
|---------------|-----------------------|--------------------|--------------|----------------------|
| Standard | Quick connect #250 | Quick connect #110 | SPST-NO | G4B-112T-US |
| | | | SPDT | G4B-112T-C-US |
| | | Quick connect #187 | SPST-NO | G4B-112T1-US |
| | | | SPDT | G4B-112T1-C-US |
| | | PC board | SPST-NO | G4B-112TP-US |
| | | | SPDT | G4B-112TP-C-US |
| High capacity | | PC board | SPST-NO | G4B-112TP-FD-US-RP |
| | | | SPDT | G4B-112TP-FD-C-US-RP |
| | | Quick connect #187 | SPST-NO | G4B-112T1-FD-US-RP |
| | | | SPDT | G4B-112T1-FD-C-US-RP |

Note: 1. Class "B" insulation available. For information consult your OMRON representative.

2. High capacity types are also available with #110 connect coil terminals.

Specifications _____

CONTACT DATA

| Туре | Standard | Standard | | High capacity | |
|-------------------------|---------------------------|------------------------------------|---------------------------|------------------------------------|--|
| Load | Resistive (p.f.=1) | Inductive (p.f.=0.40) (L/R=7ms) | Resistive (p.f.=1) | Inductive (p.f.=0.40) (L/R=7ms) | |
| Rated load | 220 VAC 15A 24 VDC 15A | 220 VAC 10A 24 VDC 7A | 220 VAC 25A 24 VDC 25A | 220 VAC 20A 24 VDC 15A | |
| Contact material | AgCdO | AgCdO | | AgInSn | |
| Carry current | 20A | 20A | | 25A | |
| Max. operating voltage | 250 VAC, 125 VDC | — | 250 VAC, 125 VDC | | |
| Max. operating current | 20 A | — | 25A | | |
| Max. switching capacity | 3,300VA, 360W | 2,200VA, 170W | 5,500VA, 600W | | |
| Min. permissible load | 100 mA, 5 VDC | | | | |

G4B

G4B _____

COIL DATA

AC

| Rated voltage | Rated current (mA) | t | Coil resistance | Pick-up voltage | Dropout voltage | Maximum voltage | Power consumption |
|---------------|-----------------------|-------|--------------------|--------------------|--------------------|--------------------|-------------------|
| (V) | 50Hz | 60Hz | (Ω) | % of rated voltage | | | (VA,W) |
| 6 | 254 | 217 | _ | 80% max. | 30% min. | 110% max. | Approx.1.30 VA |
| 12 | 126.50 | 108 | | | | | |
| 24 | 63 | 54 | | | | | |
| 50 | 30.50 | 26 | | | | | |
| 100 | 15 | 13 | | | | | |
| 120 | 12.60 | 10.80 | | | | | |
| 240 | 6.30 | 5.40 | | | | | |

DC

| Rated voltage (V) | Rated current (mA) | Coil resistance (Ω) | Pick-up voltage % of rated vo | Dropout voltage | Maximum voltage | Power consumption (VA,W) |
|-------------------------|-----------------------|---------------------------|-------------------------------------|--------------------|--------------------|--------------------------------|
| 6 | 200 | 30 | 80% max. | 10% min. | 110% max. | Approx. 1.20 W |
| 12 | 89 | 135 | | | | |
| 24 | 50 | 480 | | | | |
| 48 | 25 | 1,920 | | | | |
| 100 | 12 | 8,300 | | | | |
| 110 | 9 | 12,300 | | | | |

Note: The rated current and coil resistance are measured at a coil temperature of 23°C (73°F) with tolerances of ±10% for DC rated current and +15%, -20% for AC rated current, and ±15% for rated coil resistance.

■ CHARACTERISTICS

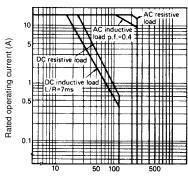
| Contact resistance | | 30 mΩ max. | | |
|--------------------------------|------------------------|---|--|--|
| Operate time | | 20 ms max. | | |
| Release time | | 20 ms max. | | |
| Operating frequency Mechanical | | 1,800 operations/hour | | |
| | | 1,800 operations/hour (under rated load) | | |
| Insulation resistance | | 100 MΩ min (at 500 VDC) | | |
| Dielectric strength | | 2,000 VAC 50/60 Hz for 1 minute (1,000 VAC between non-continuous contacts) | | |
| Vibration | Mechanical durability | 10 to 55 Hz, 1.50 mm (0.06 in) double amplitude | | |
| | Malfunction durability | 10 to 55 Hz, 1.50 mm (0.06 in) double amplitude | | |
| Shock | Mechanical durability | Approx. 100 G | | |
| | Malfunction durability | Approx. 20 G | | |
| Ambient temperature | | -10° to 55°C (14° to 131°F) | | |
| Humidity | | 35% to 85% RH | | |
| Service life | Mechanical | 10 million operations min. (at 18,000 operations/hour) | | |
| | Electrical | See "Characteristic Data" | | |
| Weight | | Approx. 44 g (1.55 oz) | | |

Note: Data shown are of initial value.

■ CHARACTERISTIC DATA

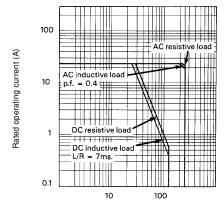
Standard

Maximum switching capacity



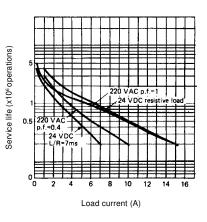
Rated operating voltage (V)

High Capacity Maximum switching capacity

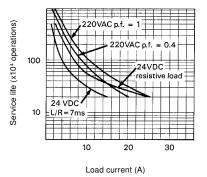


Rated operating voltage (V)

Electrical service life



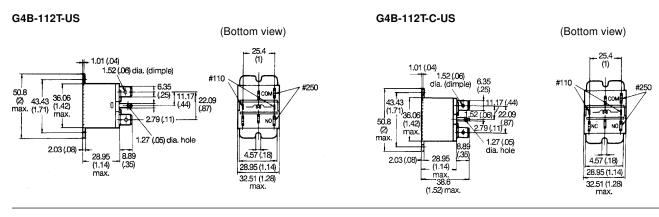
Electrical service life



Dimensions.

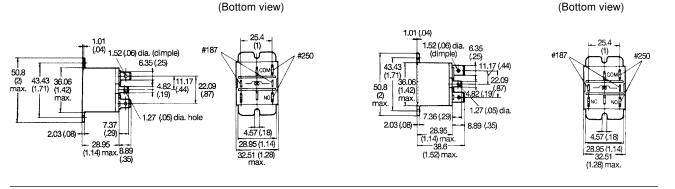
Unit: mm (inch)

RELAYS



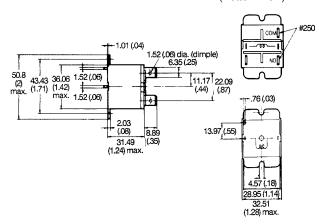
G4B-112T1-US

(Bottom view)



G4B-112TP-US

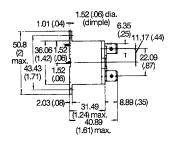
(Bottom view)

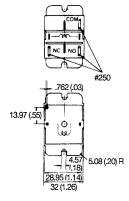


G4B-112TP-C-US

G4B-112T1-C-US

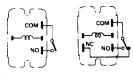
(Bottom view)





G4B-112T-US, G4B-112T-C-US G4B-112T1-US, G4B-112T1-C-US

Terminal layout/ Internal connection (Bottom view)



G4B-112T(-C)-US G4B-112T1(-C)-US

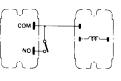
Mounting holes (Bottom view)

43.43±.10 (1.71±.004)

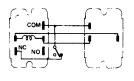
2–4.57 (.18) dia. holes

G4B-112TP-US

Terminal layout/ Internal connection (Bottom view) (Top view)

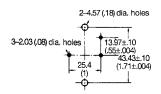






G4B-112TP(-C)-US

Mounting holes (Bottom view)



Note: Recommended panel thickness is 1.01 to 2.03 mm (0.04 to 0.08 in).

■ APPROVALS

Standard

UL (File No. E41643)

| Туре | Contact form | Coil ratings | Contact ratings |
|------|--------------|--------------|---------------------------|
| G4B | SPST-NO | 6 to 120 VAC | 15 A, 28 VDC (Resistive) |
| | SPDT | 6 to 100 VDC | 15 A, 120 VAC (Inductive) |
| | | | 10A, 240 VAC (Inductive) |
| | | | 1 HP, 120 VAC (HP rating) |
| | | | TV-5 AC |
| | | | TV rating |

CSA (File No. LR31928)

| Туре | Contact form | Coil ratings | Contact ratings |
|------|--------------|--------------|-----------------------------|
| G4B | SPST-NO | 6 to 120 VAC | 15 A, 28 VDC (Resistive) |
| | SPDT | 6 to 120 VDC | 10A, 120 VAC (Inductive) |
| | | | 1/2 HP, 120 VAC (HP rating) |

High Capacity

UL (File No. 41643)

| Туре | Contact form | Coil ratings | Contact ratings |
|------|--------------|--------------|---------------------------------|
| G4B | SPST-NO | 6 to 120 VAC | 25 A, 250 VAC (General purpose) |
| | SPTD | 6 to 100 VDC | 2 HP, 250 VAC |

Note: 1. The rated values approved by each of the safety standards may be different from the performance characteristics individually defined in this catalog.

2. In the interest of product improvement, specifications are subject to change.

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Cat. No. GC RLY6

9/97

Specifications subject to change without notice.

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