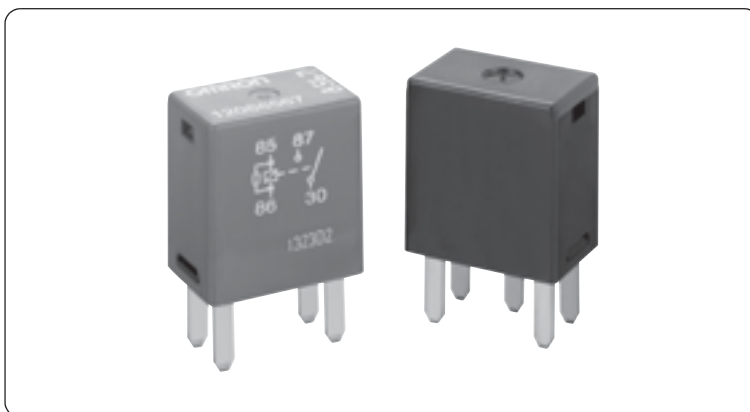


G8V

Automotive Micro 280 relay

Micro 280 terminal layout

- Both SPST and SPDT available
- Miniaturized package (reduced outer length and width)
- L x W x H = 22.5 x 15 x 25.5 mm nominal
- 280-terminal type
- Full automated assembly



■ Type standard

G8V-□□□□-□

① ② ③ ④ ⑤

| | Classification | Symbol | Meaning of the symbol |
|---|-------------------------|--------|-------------------------|
| ① | Number of contact poles | 1 | Number of contact poles |
| ② | Contact structure | A | 1a contact |
| | | C | 1c contact |
| ③ | Protective structure | 7 | Unsealed (In a case) |
| ④ | Terminal form | T | Plug-in type |
| ⑤ | Surge suppressor | R | Built-in resistor |

■ Classification

| Classification | Terminal form | Contact structure | Protective structure | Rated coil | | Type |
|----------------|----------------------|-------------------|----------------------|-------------|----------------|------------|
| | | | | Voltage (V) | Resistance (Ω) | |
| 280 Micro | Plug-in 280 terminal | SPST (1a) | Unsealed (In a case) | DC12 | 85 | G8V-1A7T-R |
| | | SPDT (1c) | | | | G8V-1C7T-R |

■ Ratings

● Operation coil

| Rated voltage (V) | Coil resistance (Ω) | | | Rated current (mA) | Operating voltage (V) | Release voltage (V) | Service voltage range (V) | Rated power consumption (mW) |
|-------------------|---------------------|---------------|-----------------------------|--------------------|-----------------------|---------------------|---------------------------|------------------------------|
| | Between terminals | Internal coil | Surge suppressor resistance | | | | | |
| DC12 | 85 | 97 | 1/2W 680 | 141 | 8.0 or less | 1.0 or more | DC10 to 16 | 1694 |

● Switching area

| Item | | Performance |
|---------------------------------------|-----------|----------------------|
| Contact material | | Silver alloy |
| Rated voltage | | DC12V |
| Rated load | N.O. side | Resistance load, 20A |
| | N.C. side | Resistance load, 10A |
| Inrush current | N.O. side | 60A |
| | N.C. side | 30A |
| Continuous carry current ¹ | N.O. side | 20A |
| | N.C. side | 10A |
| Min. Carry / Switching Current | | DC12V 1A |

Please confirm Omron Safety Precautions for all automotive relays first.
Omron can not guarantee automotive relays before finish making a contract with product

■ Performance

| Item | | Standard value |
|-------------------------------------|----------------------------|------------------------------------|
| Voltage drop between terminals | N.O. side | 150mV or less, 10A |
| | N.C. side | 175mV or less, 10A |
| Operating time ^{*2} | | Max. 10ms at 14V (Normally 4ms) |
| Release time ^{*2} | | Max. 10ms at 14V (Normally 1.8 ms) |
| Insulation resistance ^{*3} | Between coil and terminal | 20MΩ or more |
| | Between homopolar contacts | 20MΩ or more |
| Withstand voltage ^{*4} | Between coil and terminal | AC500V, for 1minute |
| | Between homopolar contacts | AC500V, for 1minute |
| Vibration tolerance | Durability | 33Hz 43.1m/s ² |
| | Malfunction | 20 to 500Hz 43.1m/s ² |
| Mechanical endurance | | 1,000,000 times |
| Electrical endurance | | 100,000 times (load dependent) |
| Ambient temperature | | -40 to +125°C |
| Ambient humidity | | 35 to 95%RH |
| Weight | | Approx. 19.3g |

■ Packing

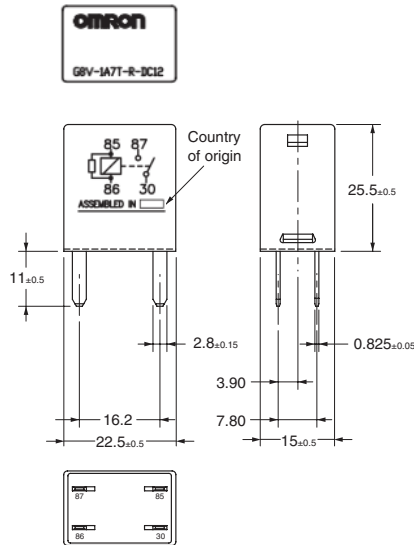
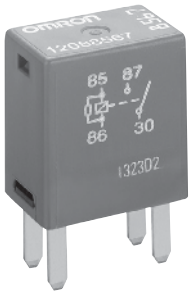
| Packing form | Tray |
|-------------------|-----------------------|
| MOQ ^{*5} | 480pcs (96pcs×5trays) |

Note: All values above are measured in early time under an ambient temperature of +20°C and humidity of 65% unless stated

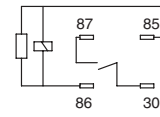
- *1. The value stated is at maximum temperature in a guaranteed ambient temperature.
- *2. Bounce time is not included.
- *3. Measured at DC500V.
- *4. Measured under 1mA of leak current, 50/60Hz for 1minute.
- *5. Minimum Order Quantity is subject to change, please feel free to contact our sales representatives.

■ Dimensions (Unit: mm)

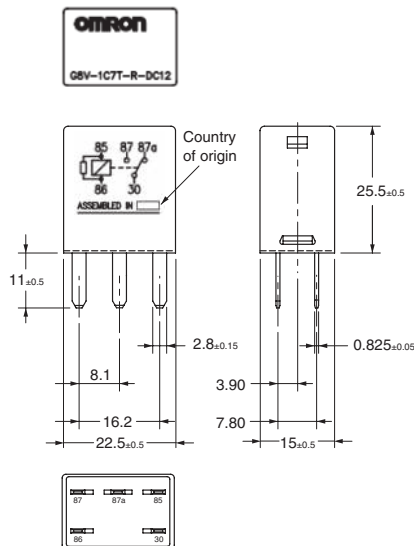
G8V-1A7T-R



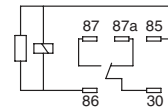
Terminal arrangement / Internal connections (BOTTOM VIEW)



G8V-1C7T-R



Terminal arrangement / Internal connections (BOTTOM VIEW)



* Tolerance unless otherwise specified
 Less than 1 mm: ±0.1 mm
 Less than 1 to 3 mm: ±0.2 mm
 3 mm or more: ±0.3 mm

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