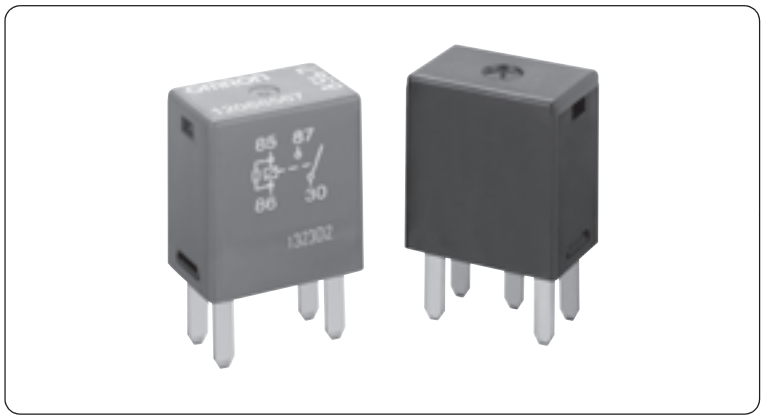
G8V
Automotive Micro 280 relay

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

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■ 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.

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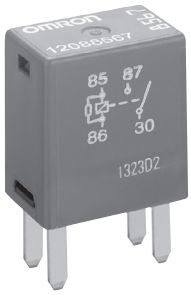
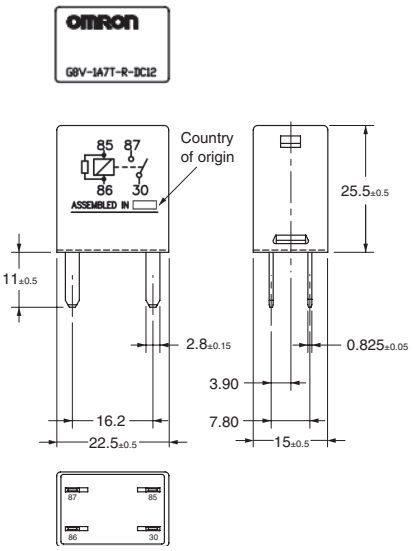
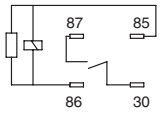
■ Dimensions (Unit: mm)

G8V-1A7T-R

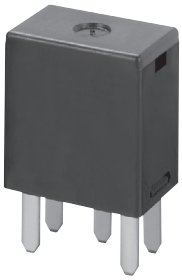


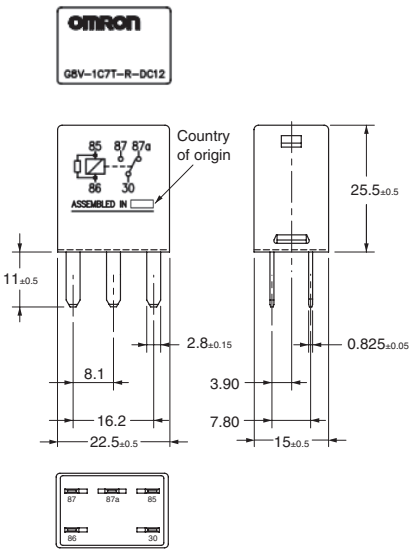


Terminal arrangement / Internal connections
(BOTTOM VIEW)



G8V-1C7T-R





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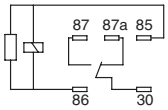

* Tolerance unless otherwise specified Less than 1 mm: ±0.1 mm
Less than 1 to 3 mm: ±0.2 mm
3 mm or more: ±0.3 mm

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