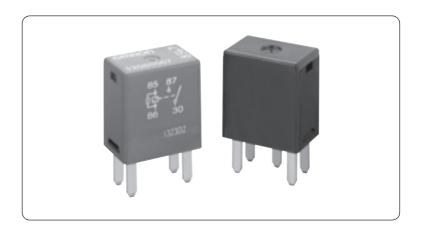
# **G8V**Automotive Micro 280 relay

# 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



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

# **■** Classification

Classification	Terminal form	Contact structure	Protective structure	Rated coil		Tuno
				Voltage (V)	Resistance ( $\Omega$ )	Type
280 Micro	Plug-in 280 terminal	SPST (1a)	Unsealed (In a case)	DC12	85	G8V-1A7T-R
200 IVIICIO	Flug-III 200 terminai	SPDT (1c)				G8V-1C7T-R

# ■ Ratings

# Operation coil

volt	Rated		Coil resistance (Ω)		Rated	Operating	Release	Service voltage	Rated power
	voltage (V)	Between terminals	Internal coil	Surge suppressor resistance	current (mA)	voltage (V)	voltage (V)	range (V)	consumption (mW)
	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	
Hateu loau	N.C. side	Resistance load, 10A	
Inrush current	N.O. side	60A	
illiusii cuiteiit	N.C. side	30A	
Continuous carry	N.O. side	20A	
current*1	N.C. side	10A	
Min. Carry / Swite	ching 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	N.O. side	150mV or less, 10A		
between terminals	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	20M $\Omega$ or more		
	Between homopolar contacts	$20$ Μ $\Omega$ or more		
Withstand	Between coil and terminal	AC500V, for 1minute		
voltage*4	Between homopolar contacts	AC500V, for 1minute		
Vibration	Durability	33Hz 43.1m/s²		
tolerance	Malfunction	20 to 500Hz 43.1m/s <sup>2</sup>		
Mechanical endu	rance	1,000,000 times		
Electrical endurar	nce	100,000 times (load dependent)		
Ambient tempera	ture	−40 to +125°C		
Ambient humidity	,	35 to 95%RH		
Weight		Approx. 19.3g		

# ■ Packing

Packing form	Tray	
MOQ*5	480pcs (96pcs×5trays)	

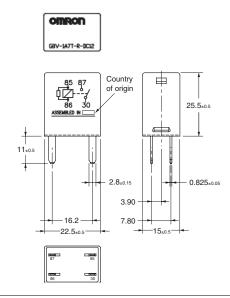
Note: All values above are measured in early time under an ambient temperature of +20°C and humidity of 65% unless stated \*1. The value stated is at maximum temperature in a guaranteed ambient temperature. \*2. Bounce time is not included.

- \*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



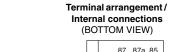


Terminal arrangement / Internal connections (BOTTOM VIEW)

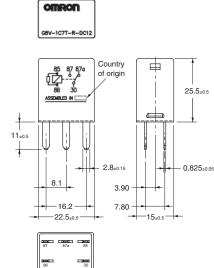


### G8V-1C7T-R









\* Tolerance unless otherwise specified Less than 1 mm: ±0.1 mm Less than 1 to 3 mm: ±0.2 mm

3 mm or more:  $\pm 0.3$  mm