

Micro 280 Automotive Relay

G8V

- Available in both SPST and SPDT versions
- L x W x H = 22.5 x 15 x 25 mm nominal
- 280 Terminal Type
- Fully automated assembly
- Made in Canada

Available Types

Type	Description
G8V-1A7T-R-DC12	Micro 280 SPST Plug In with Resistor
G8V-1A7T-DC12	Micro 280 SPST Plug In without Resistor
G8V-1C7T-R-DC12	Micro 280 SPDT Plug In with Resistor
G8V-1C7T-DC12	Micro 280 SPDT Plug In without Resistor

Contact Data

Typical Switching Current	Inrush 60A, Steady 20A (N.O.) / Inrush 30A, Steady 10A (N.C.)
Max Switching Voltage	16V
Min. Carry / Switching Current	1A
Contact Material	Silver Tin Oxide (Cadmium Free)

Coil Ratings (at 20°C)

Type	Rated Voltage	Coil Resistance ±10%	Coil Resistance w/ 680Ω suppression ±10%	Nominal Power Consumption	Pull in Voltage	Dropout Voltage
G8V-1A7T-R-DC12 / G8V-1C7T-R-DC12	12VDC	72 - 104 Ω	65 - 90 Ω	1.6 W	< 8.0 V	> 1.0 V

Typical Applications

Electric Sunroof	Head Lamps
Blower Fan Motor	Fuel Pump
ABS	Horn

Characteristics

Max. Initial Contact Voltage Drop	15mV @ 1A	
NO Activation Time	10 ms max. (4 ms typical) @ 14 V	
NO Deactivation Time	10 ms max. (1.8 ms typical*) @ 14 V	
Insulation resistance	20 M Ω min (at 500 VDC)	
Dielectric strength	< 1.0 mA max. leakage at 900 VAC, 50-60 Hz for 1 sec between coil and contacts and between contacts.	
Ambient Operating Temperature	-40°C to 125°C	
Humidity	Up to 95%	
Service life	Mechanical	1,000,000 operations min.
	Electrical	100,000 operations min (load dependent).
Weight	19.3g	

* Typical data includes coil suppression. Release times may decrease without coil suppression.

Characteristic Reference Data

Durability Data

Relay	Load Type	Current	Cycles Tested
G8V	N.O. Motor Load	25 A Inrush	300,000 3s on, 4s off
		20 A Steady State	
	N.C. Motor Load	13 A Inrush	300,000 3s on, 4s off
		10 A Steady State	
	N.O. Compressor Load	47 A Inrush	390,000 2s on, 2s off
		10.5 A Steady State	
	N.O. Resistive Load	20 A Steady State	100,000 2s on, 2s off
	N.O. Lamp Load	100 A Inrush	300,000 3s on, 4s off
		20 A Steady State	
	N.C. Lamp Load	50 A Inrush	300,000 3s on, 4s off
		10 A Steady State	

Dimensions

