



High-Current Micro ISO Automotive Relay G8HE

- Available in both SPST and SPDT versions
- Miniaturized package (reduced outer length and width)
- Designed to meet all standard Mini ISO load requirements
- L x W x H = 22.7 x 15.2 x 26.6 mm nominal
- ISO footprint with 280-size coil terminals for insertion error-proofing with standard Micro ISO product
- Fully automated assembly

Available Types

Type	Description
G8HE-1A7T-R-DC12	High-Current Micro ISO SPST Plug-In with Resistor
G8HE-1C7T-R-DC12	High-Current Micro ISO SPDT Plug-In with Resistor

Contact Data

Typical Switching Current	Inrush 150A, Steady State 40A (N.O.) / Inrush 40A, Steady State 20A (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
G8HE-1A7T-R-DC12 / G8HE-1C7T-R-DC12	12VDC	84 - 124 Ω	75 - 105 Ω	1.6 W	< 8 V	> 1 V

* Power consumption includes suppression resistor. Power consumption will decrease without coil suppression.

Typical Applications

Motor Load
Lamp Load
Resistive Load
Engine Cooling Fan
HVAC
Rear Defrost

G8HE Rev A

Characteristics

Max. Initial Contact Voltage Drop		50mV @ 10A / 5 mΩ
NO Activation Time		20 ms max. (6 ms typical) @ 13.5 V
NO Deactivation Time		20 ms max. (1.5 ms typical*) @ 13.5 V
Insulation resistance		20 MΩ min (at 500 VDC)
Dielectric strength		1 mA max. leakage at 500 VAC (50 Hz) for 0.5 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		19.9g

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

Characteristic Reference Data

Durability Data

Relay	Load Type	Current	Cycles Tested
G8HE	N.O. Motor Load	80 A Inrush	300,000 3s on, 4s off
		33 A Steady State	
	N.C. Motor Load	40 A Inrush	300,000 3s on, 4s off
		20A Steady State	
	N.O. Lamp Load	150 A Inrush	300,000 3s on, 4s off
		30 A Steady State	

G8HE Rev A

Dimensions

