



**Features**

- 50A switching capability.
- Transient suppression resistor available
- Plug-in terminals.
- Extended operation range.
- Optional mounting bracket.

**Typical Applications**

Rear window defogger, Battery disconnection, Air-conditioning,  
 Fuel pump control, Cooling fan (multi-speed), Fog lamp & headlight control.

**CHARACTERISTICS**

Contact Arrangement	1C, 1A	Coil power	1.6W
Contact voltage drop	Typ. 60mV (at 10A 13.5 VDC)	Coil Voltage	6VDC, 12VDC, 24VDC
	Max. 100mV (at 10A 13.5 VDC)	Operate time	Max. : 7ms
Initial contact resistance	Max. 50mΩ (at 1A 24 VDC)	Release time	Max. : 5ms
Electrical life	1.5×10 <sup>5</sup> ops	Ambient temp.	-40℃ ~ +105℃
Mechanical life	1×10 <sup>7</sup> ops	Vibration Resistan	1.5mm, 10Hz to 40Hz
Max. switch current	50A	Shock resistance	100m/s <sup>2</sup>
Max. Make current <sup>(1)</sup>	120A (NO) /45A (NC)		200m/s <sup>3</sup>
Min. Applicable load	6VDC, 100mA	Termination	Plug-in & PCB
Insulation resistance	100MΩ, 500VDC	Weight	Approx. 32g
Dielectric Strength	550VAC 1min	Construction	Dust covered

Note(1): Inrush current for lamp load

**CONTACT DATA**

Nominal Voltage VDC	Load Version		Carry current (A)			Electrical life (ops)	Contact Material	Testing Ambient temp.	Contact Wiring Diagram
			1C		1A				
			N. O.	N. C.	N. O.				
12 VDC	Res. 14VDC on/off		50	30	50	1.5×10 <sup>5</sup>	AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>	23℃	Diagram 1
	13VDC Lamp	on	150	—	150	1×10 <sup>5</sup>	AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>	23℃	Diagram 2
		off	20	—	20				
24 VDC	Res. 27VDC on/off		40	25	40	1.5×10 <sup>5</sup>	AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>	23℃	Diagram 1
	27VDC Lamp	on	90	—	90	1×10 <sup>5</sup>	AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>	23℃	Diagram 2
		off	15	—	15				

Contact Wiring Diagram

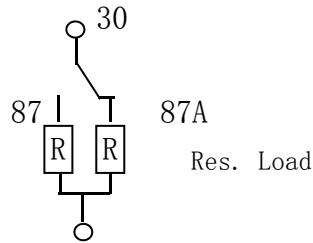


Diagram 1

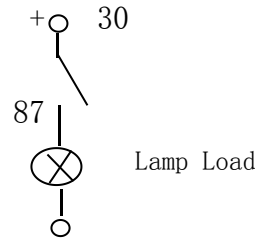


Diagram 2

COIL DATA

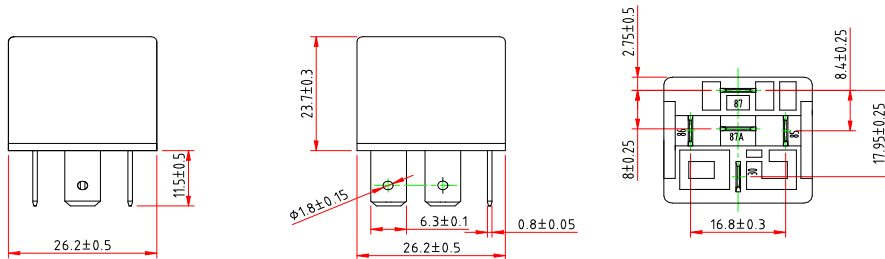
23°C

Nominal Voltage VDC	Max. Allowable Overdrive VDC		Pick-up Voltage VDC	Drop-out Voltage VDC	Coil Resistance $\Omega \pm 10\%$	Parallel Resistance $\Omega$
	23°C	85°C				
6	10.1	7.9	<3.6	>0.6	22	
12	20.2	15.7	<7.2	>1.2	85	---
12	20.2	15.7	<7.2	>1.2	85	680
24	40.5	31.5	<14.4	>2.4	350	---
24	40.5	31.5	<14.4	>2.4	385	2700

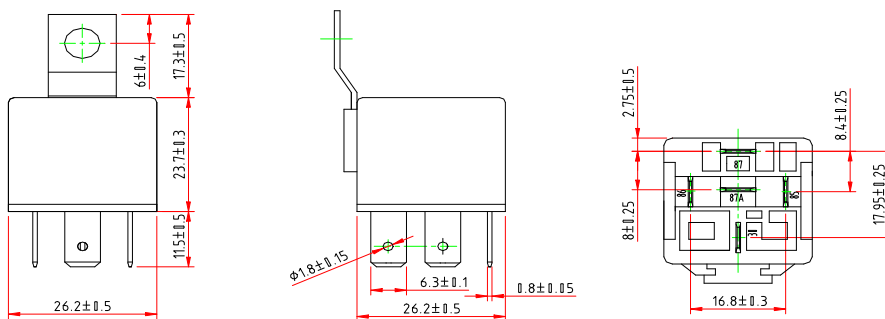
ORDERING INFORMATION

	M5/	012-	1H	1	G	R-	XXX
Relay Type							
Coil voltage	006:6VDC 012:12VDC 024:24VDC						
Contact arrangement	1H: 1 Form A 1Z: 1 Form C						
Version	1: QC Terminal 2: QC Terminal & Metal Shrouded						
Contact Material	G:AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub> S: Special AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub>						
Parallel resistor	Nil: Without resistor R: With resistor D:Parallel diode (D1:anode on #86,D2:anode on #85)						
Customer special request code:							

Plug-in Type



Plug-in & Metal shrouded Type



Wiring Diagram

