



Features

- 40A switching capability.
- Optional Contact arrangement.
- Plug-in or PC board 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	1A, 1C, 2A, 1B	Coil Voltage	6VDC, 12VDC, 24VDC
Contact voltage drop	Typ. 60mV (at 10A 13.5 VDC)	Operate time	Max.: 7ms
	Max. 100mV (at 10A 13.5 VDC)	Release time	Max.: 5ms
Initial contact resistance	Max. 50mΩ (at 1A 24 VDC)	Ambient temp.	M4: -40°C ~ +85°C M4H: -40°C ~ +125°C
Electrical life	1×10 ⁵ ops	Vibration Resistance	1.5mm, 10Hz to 40Hz
Mechanical life	1×10 ⁷ ops	Shock resistance	Functional 100m/s ²
Max. Carry current	60A(NO)/40A(NC)		Destructive 200m/s ²
Max. Make current ⁽¹⁾	120A(NO)/45A(NC)	Termination	Plug-in & PCB
Min. Applicable load	6VDC, 100mA	Weight	Approx. 32g
Insulation resistance	100MΩ, 500VDC	Construction	Dust covered
Dielectric Strength	550VAC 1min		

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		40	30	40	1×10 ⁵	AgSnO ₂ In ₂ O ₃	23°C	Diagram 1
	13VDC Lamp	on	120	—	120	1×10 ⁵	AgSnO ₂ In ₂ O ₃	23°C	Diagram 2
		off	20	—	20				
24 VDC	Res. 27VDC on/off		20	10	20	1×10 ⁵	AgSnO ₂ In ₂ O ₃	23°C	Diagram 1
	27VDC Lamp	on	90	—	90	1×10 ⁵	AgSnO ₂ In ₂ O ₃	23°C	Diagram 2
		off	15	—	15				

Contact Wiring Diagram

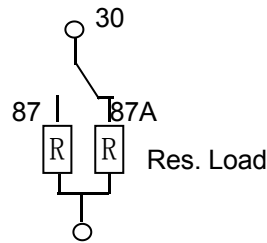


Diagram 1

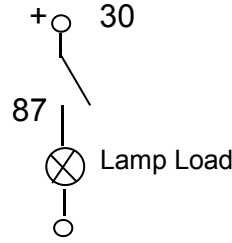


Diagram 2

COIL DATA

23°C

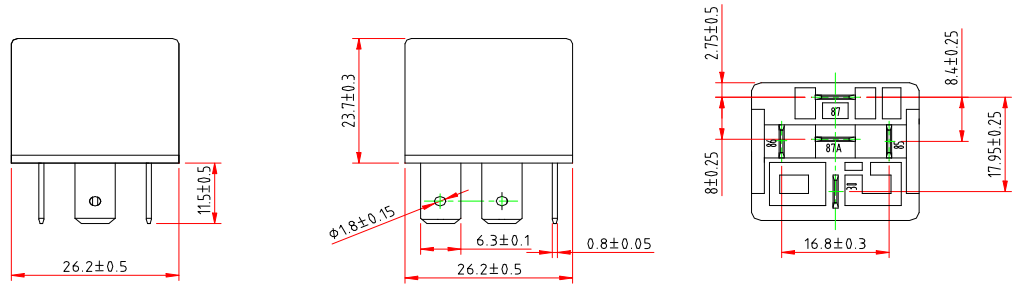
	Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Coil Resistance $\Omega \pm 10\%$	Parallel Resistance Ω	Equivalent Resistance Ω	Relay Power W	Max. Allowable Overdrive VDC	
								23°C	85°C
Standard	6	<3.9	>0.6	22	—	—	1.6	10.1	7.9
	6	<3.9	>0.6	22	180	19.6	1.8	10.1	7.9
	12	<7.8	>1.2	85	—	—	1.6	20.2	15.7
	12	<7.8	>1.2	85	680	75.6	1.9	20.2	15.7
	24	<15.6	>2.4	350	—	—	1.6	40.5	31.5
	24	<15.6	>2.4	350	2700	309.8	1.9	40.5	31.5
Low operate voltage	6	<3.6	>0.6	22	—	—	1.6	10.1	7.9
	6	<3.6	>0.6	22	180	19.6	1.8	10.1	7.9
	12	<7.2	>1.2	90	—	—	1.6	20.2	15.7
	12	<7.2	>1.2	90	680	79.5	1.8	20.2	15.7
	24	<14.4	>2.4	360	—	—	1.6	40.5	31.5
	24	<14.4	>2.4	360	2700	317.6	1.8	40.5	31.5

ORDERING INFORMATION

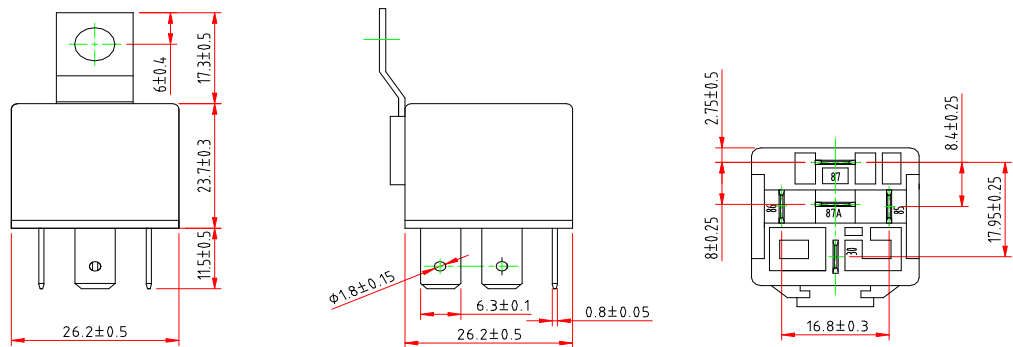
	M4/	012-	1H	1	G	R-	XXX
Relay Type	M4:QC Terminal M4L:Low operate voltage M4P:PCB Terminal						
Coil voltage	006:6VDC 012:12VDC 024:24VDC						
Contact arrangement	1H: 1 Form A 1Z: 1 Form C 1D: 1 Form B 2H:2 Form A						
Version	1: Without Bracket 2: With Bracket						
Contact Material	G:AgSnO ₂ In ₂ O ₃						
Parallel resistor	Nil: Without resistor R: With resistor D:Parallel diode (D1:anode on #86,D2:anode on #85)						
Customer special request code:							

Outline Dimensions

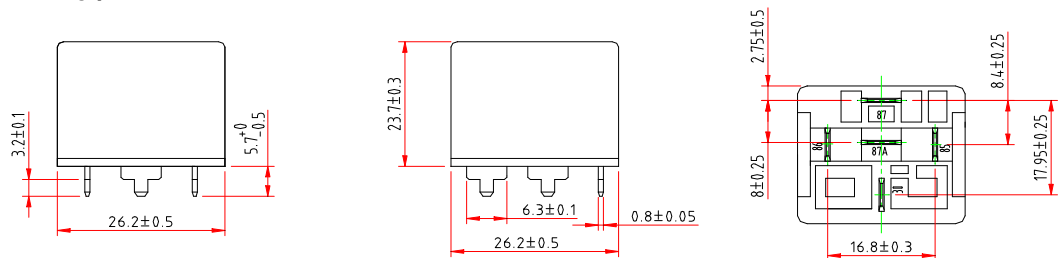
Plug-in Type



Plug-in & Metal shrouded Type



PCB Type



Wiring Diagram

