



Features

- 20A switching capability
- Ambient temp.: -40°C to 125°C
- 1 form A contact arrangement
- 2.8mm QC terminals
- RoHS & ELV Compliant

Typical Applications

Fuel pump control, Horn control, Headlight control, A/C compressor clutch

CHARACTERISTICS

Contact Arrangement	1A	Operate Time	Typ.:5ms Max.:10ms
Contact Voltage Drop	Typ.40mV (at 10A 13.5 VDC) Max.100mV (at 10A 13.5 VDC)	Release Time	Typ.:5ms Max.:10ms
Initial Contact Resistance	Max.50mΩ (at 1A 24 VDC)	Vibration Resistance	10Hz~500Hz 49m/s ² (5g)
Electrical Life	1×10 ⁵ ops	Shock Resistance	196m/s ² (20g)
Mechanical Life	1×10 ⁷ ops	Termination	2.8mm QC
Max. Continuous Current	20A(Resistive)	Weight	Approx.11g
Max. Switching Current	30A(Resistive)	Construction	Dust-proof/Sealed
Max. Switching Voltage	27VDC(Resistive)	Mechanical Data	Cover retention: 200N Terminal retention: 100N Terminal resistance to bending:10N
Insulation Resistance	100MΩ,500VDC		
Dielectric Strength	550VAC 1min		
Ambient Temp.	-40°C ~ +125°C		

CONTACT DATA

Load Voltage VDC	Load Version		Carry Current(A)	On/Off Ratio		Electrical Life (ops)	Contact Material
			1A	ON s	OFF s		
			N.O.				
13.5 VDC	Resistive	Make	20	2	2	1×10 ⁵	AgSnO ₂ In ₂ O ₃
		Break	20				
	Motor	Make	40	2	2	1×10 ⁵	AgSnO ₂ In ₂ O ₃
		Break	20				
	Lamp	Make	100	2	2	1×10 ⁵	AgSnO ₂ In ₂ O ₃
		Break	20				

COIL DATA

23°C

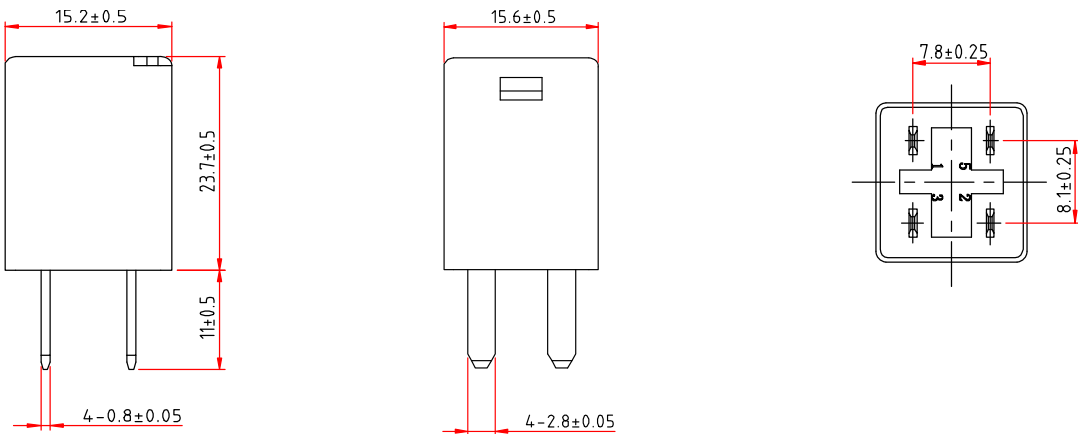
	Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Coil Resistance 1±10% Ω	Parallel Resistance Ω	Equivalent Resistance Ω	Relay Power	Max. Allowable Overdrive VDC	
								23 °C	85°C
Standard	12	<7.2	>1.2	150	—	—	0.96	20	15
	12	<7.2	>1.2	150	1000	130.4	1.1	20	15

ORDERING INFORMATION

	M10	012-	1H	S	R	XXX
Relay Type						
Coil Voltage	012: 12vdc 024: 24vdc					
Contact Arrangement	1H: 1 Form A 1Z: 1 Form C					
Construction	S: Sealed Nil: Dust-proof					
Parallel Resistor	R: With resistor Nil: Without resistor					
Customer special request code:						

OUTLINE DIMENSIONS AND WIRING DIAGRAM

Unit:mm



Wiring Diagram

