





20.0 x 15.2 x 22.0 mm

#### **Features**

- Switching capacity up to 20A
- Small size and light weight
- PCB pin and quick connect mounting available
- Suitable for automobile and lamp accessories
- QS-9000, ISO-9002 Certified Manufacturing

#### Contact Data\*

Contact Arrangement	1A = SPST N.O.
	1B = SPST N.C.
Contact Rating	1A: 20A @ 14VDC
	1B : 15A @ 14VDC

Contact Resistance	< 50 milliohms initial		
Contact Material	AgSnO <sub>2</sub>		
Maximum Switching Power	280W		
Maximum Switching Voltage	75VDC		
Maximum Switching Current	30A		

#### Coil Data\*

Coil Voltage VDC		Coil Resistance Ω +/- 10%	Pick Up Voltage VDC (max) 70% of rated	Release Voltage VDC (min) 10% of rated	Coil Power W	Operate Time ms	Release Time ms	
Rated	Max		voltage	voltage				
12	15.6	124	8.40	1.2	1.16	10	7	
24	31.2	489	16.80	2.4	1.10	10	, , , , , , , , , , , , , , , , , , ,	

#### General Data\*

Electrical Life @ rated load	100K cycles, average		
Mechanical Life	10M cycles, average		
Insulation Resistance	100M Ω min. @ 500VDC initial		
Dielectric Strength, Coil to Contact	1500V rms min. @ sea level initial		
Contact to Contact	1000V rms min. @ sea level initial		
Shock Resistance	100m/s <sup>2</sup> for 11 ms		
Vibration Resistance	1.27mm double amplitude 10~40Hz		
Terminal (Copper Alloy) Strength	10N (quick connect), 4N (PCB pins)		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-40°C to +155°C		
Solderability	260°C for 5 s		
Weight	14g		

<sup>\*</sup> Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

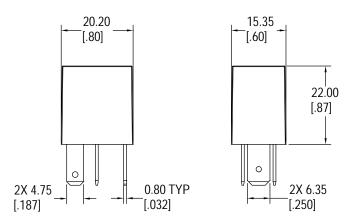


# **Ordering Information**

1. Series	A1M	1A	С	Q	12VDC		
A1M							
2. Contact Arrangement 1A = SPST N.O. 1B = SPST N.C.							
3. Sealing Option C = Dust Cover							
4. Termination Q = Quick Connect							
5. Coil Voltage 12VDC 24VDC							
6. Coil Suppression Blank = Standard D = Diode (1N4005) R = Resistor (680 ohms) ** Consult factory if other values are needed							

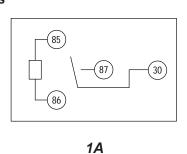
### **Dimensions**

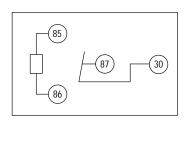
Units = mm



## Schematics & PC Layouts

**Bottom Views** 





1B