





#### Features

- Maxi ISO Sized Automotive Relay
- Internal Blowout Magnets
- Capable of Switching up to 145VDC
- Suitable for DC Motor and Lamp Control
- PCB Pin and Quick Connect Mounting Options

### Contact Data\*

Contact Arrangement	1A = SPST N.O.		
	1C = SPDT		
Contact Rating	80A @ 14VDC, resistive		
	60A @ 36VDC, resistive		
	50A @ 48VDC, resistive		
	30A @ 72VDC, resistive		
	15A @ 90VDC, resistive		
	5A @ 145VDC, resistive		

Contact Resistance	< 50 milliohms initial		
Contact Material	AgSnO <sub>2</sub>		
Maximum Switching Voltage	145VDC		
Maximum Switching Current	Make : 150A@14VDC for 3 seconds		
	Break : 80A		

# Coil Data\*

	oltage DC	Coil Resistance Ω +/- 10%	Pick Up Voltage VDC (max) 70% of rated	VDC (max) VDC (min)		Operate Time ms	Release Time ms
Rated	Max	1.6W	voltage	voltage			
12	15.6	90	7.8	1.2	1.6W	15	15
24	31.2	360	15.6	2.4	1.000		

### General Data\*

Electrical Life @ rated load		100K cycles, average			
Mechanical Life		500K cycles, average			
Insulation Resistance		1000M Ω min. @ 500VDC initial			
Dielectric Strength Coil to Contact		750V rms min. @ sea level initial			
	Contact to Contact	500V rms min. @ sea level initial			
Shock Resistance	Functional	42m/s² (4.4G)			
	Destructive	288m/s <sup>2</sup> (30G)			
Vibration Resistance		0.5mm 10~500Hz double amplitude (10G)			
Operating Temperature		-40°C to +125°C (above 85°C, consult factory)			
Storage Temperature		-40°C to +155°C			
Solderability		260°C for 5 s			
Weight		80g			
		*			

<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.

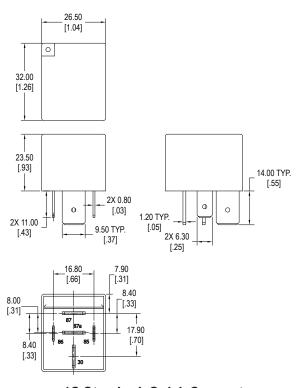


### **Ordering Information**

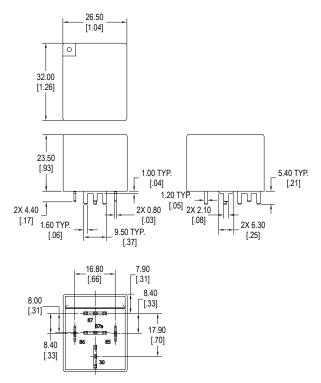
1. Series	A3K	1A	S	Q	12VDC	1.6	R
A3K standard A3KM with metal bracket	/ lore		Ũ	ď	12000	1.0	
2. Contact Arrangement 1A = SPST N.O. 1C = SPDT							
3. Sealing Option S = Sealed C = Dust Cover							
4. Termination P = PCB Pins Q = Quick Connect							
5. Coil Voltage 12VDC 24VDC							
6. Coil Power 1.6 = 1.6W							
<ul> <li>7. Coil Suppression</li> <li>Blank = Standard</li> <li>D = Diode (1N4007) Cathode on "86" term</li> <li>R = Resistor (680Ω for 12VDC;2700Ω for 1</li> <li>** Consult factory if other values are needed</li> </ul>							

### Dimensions





1C Standard, Quick Connect

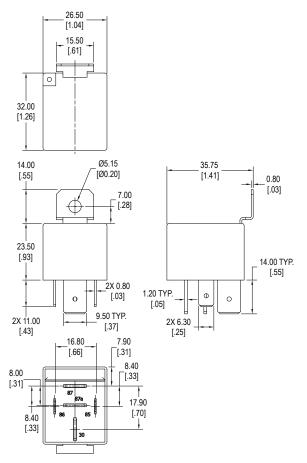


1C Standard, PC Terminals

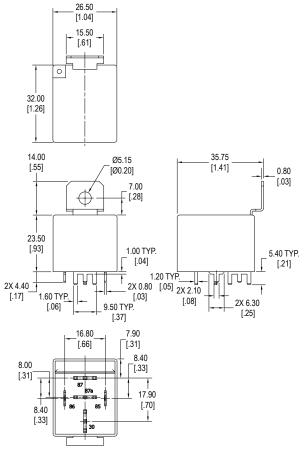


#### Dimensions

Units = mm



1C Metal Bracket, Quick Connect

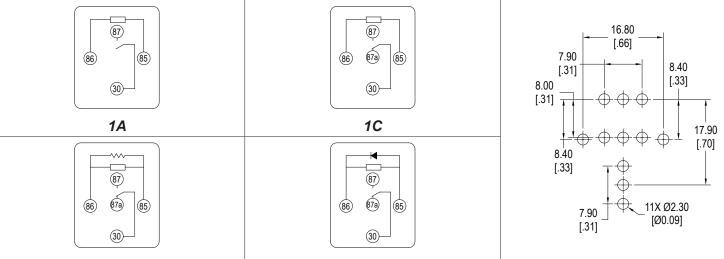


1C Metal Bracket, PC Terminals



## Schematics & PC Layout

**Bottom Views** 



1C with Resistor

1C with Diode