

## 25 AMP SUB-MICRO AUTOMOTIVE RELAY

## FEATURES

- Up to 25 Amp switching capability in a very compact size
- Vibration and shock resistant
- Designed for power windows, door locks and wiper motors, seat adjusters, and more
- · Epoxy sealed for automatic wave soldering
- ISO/TS 16949, ISO9001, ISO14000
- Cost effective
- Single and Dual (Twin) relay versions



#### CONTACTS

Arrangement	SPDT (1 Form C) DPDT (2 Form C) (Twin)			
Ratings	Resistive load:			
	Max. switched power: 400 W Max. switched current: 25 A Max. switched voltage: 16 VDC			
	Rated load: 25 A at 16 VDC, locked motor			
Material	Silver tin oxide			
Resistance	< 25 milliohms initially (6 V, 1 A voltage drop method)			

#### COIL

Power			
At Pickup Voltage (typical)	230 mW		
Max. Continuous Dissipation	2.2 W at 20°C (68°F) ambient		
Temperature Rise	40°C (72°F) at nominal coil voltage		
Max Temperature	155°C (311°F)		

#### NOTES

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Specifications subject to change without notice.

### **GENERAL DATA**

Life Expectancy	Minimum operations		
Mechanical	$1 \times 10^6$		
Electrical	1 x $10^5$ at 25 A 14 VDC locked motor		
Operate Time	3 ms typical at nominal coil voltage		
Release Time	1.5 ms typical at nominal coil voltage (with no coil suppression)		
Dielectric Strength (at sea level for 1 min.)	500 VAC coil to contact 500 VAC between open contacts		
Insulation Resistance	100 megohms min. at 20°C, 500 VDC 50% RH		
Dropout	Greater than 8.3% of nominal coil voltage		
Ambient Temperature	At nominal coil voltage		
Operating	-40°C (-40°F) to 105°C (221°F)		
Storage	-40°C (-40°F) to 155°C (311°F)		
Vibration	4.5g at 10-500 Hz		
Shock	10g operational, 100g destructive		
Enclosure	P.B.T. polyester		
Terminals	Tinned copper alloy, P.C.		
Max. Solder Temp	270°C (518°F)		
Max. Solder Time	5 seconds		
Max. Solvent Temp	80°C (176°F)		
Max. Immersion Time	30 Seconds		
Weight	4 grams		

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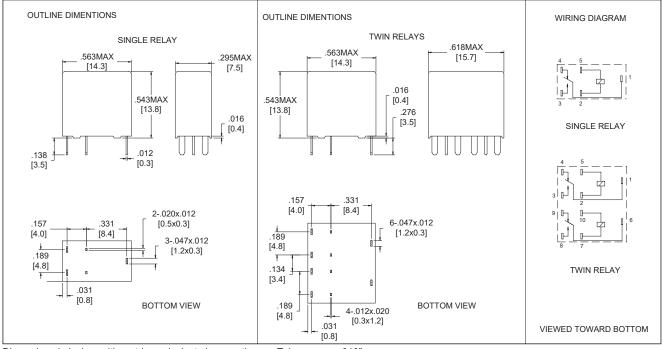


## **RELAY ORDERING DATA**

STANDARD RELAYS - 1 Form C (Single)							
COIL SPECIFICATIONS				ORDER NUMBER			
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 10%	1 Form C (SPDT)			
12	6.5	18.0	180	AZ989–1C–12DE			
12	7.2	20.0	225	AZ989-1C-12DSE			

STANDARD RELAYS - 2 Form C (Twin)							
COIL SPECIFICATIONS ORDER NUMBER							
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 10%	2 Form C (DPDT)			
12	6.5	18.0	180	AZ989–2C–12DE			
12	7.2	20.0	225	AZ989–2C–12DSE			

#### **MECHANICAL DATA**



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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12/12/12

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This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.