### **AZ974** <sub>-</sub>

# 40 AMP MINI-ISO AUTOMOTIVE RELAY

#### **FEATURES**

- PCB terminals
- 40 Amp contact rating
- High carry current (60A)
- High momentary surge current (120A)
- High operating temperature (125°C)
- Resistor or diode parallel to coil available
- Epoxy sealed versions available
- SPST (1 Form A), SPDT (1 Form C)
- ISO/TS 16949, ISO9001, ISO14000
- Tested in accordance with SAE J2544



Arrangement	SPST (1 Form A) SPDT (1 Form C)			
Ratings	Resistive load:			
	Max. switched power: 560 W (SPST) 560 W (N.O.) 420 W (N.C.)			
	Max. switched current: 40 A (SPST) 40 A (N.O.) 30 A (N.C.)			
	Max. switched voltage: 75 VDC			
Material	Silver tin oxide			
Resistance	< 100 milliohms initially (6V, 1 A voltage drop method)			

#### COIL

Power			
At Pickup Voltage (typical)	0.68 W		
Max. Continuous Dissipation	4.8 W at 20°C (68°F)		
Temperature Rise	75°C (113°F) at nominal coil voltage		
Temperature	Max. 200°C (392°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 Mechanical Electrical	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 40 A 14 VDC Res.		
Operate Time (max.)	10 ms at nominal coil voltage		
Release Time (max.)	10 ms at nominal coil voltage		
Dielectric Strength (at sea level for 1 min.)	500 Vrms coil to contact 500 Vrms contact to contact		
Insulation Resistance	100 megohms min. at 500 VDC, 20°C 50% RH		
Dropout	Greater than 10% of nominal coil voltage		
Ambient Temperature Operating Storage	-55°C (-67°F) to 125°C (257°F) -55°C (-67°F) to 200°C (392°F)		
Vibration	0.062" DA at 10-40 Hz		
Shock	10 g		
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 secomds		
Weight	31 grams		



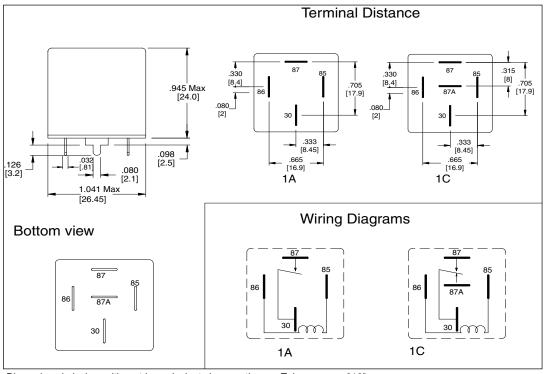
## **AZ974**

#### **RELAY ORDERING DATA**

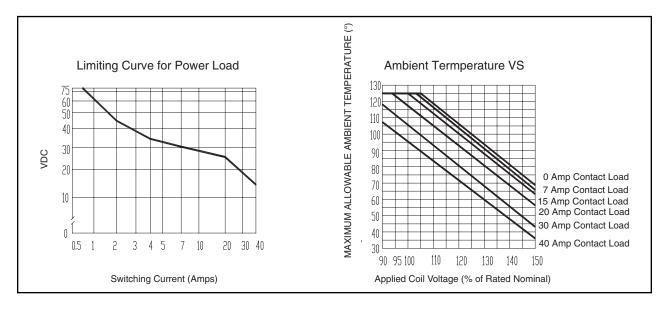
COIL SPECIFICATIONS			ORDER NUMBER*		
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 10%	SPST	SPDT
6	3.9	10.1	22	AZ974-1A-6D	AZ974-1C-6D
12	7.8	20.2	85	AZ974-1A-12D	AZ974-1C-12D
24	15.6	40.5	350	AZ974-1A-24D	AZ974-1C-24D

<sup>\*</sup>Add suffix "E" for epoxy sealed version. Add suffix "R" for resistor across coil (6V=180 ohms, 12V=680 ohms, 24V=2700 ohms). Add suffix D1 for diode across coil (anode on #86) or suffix D2 for diode across coil (anode on #85).

#### **MECHANICAL DATA**



Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm .010$ "





### AMERICAN ZETTLER, INC.