# 20 AMP SUBMINIATURE PCB POWER RELAY FOR AUTOMOTIVE USE

### **FEATURES**

- Low cost
- 20 Amp contact rating
- Low profile, small footprint
- High operating temperature (85°C)
- SPST (1 Form A), SPDT (1 Form C)
- ISO/TS 16949, ISO 14001



# **CONTACTS**

Arrangement	SPST (1 Form A) SPST NODM (1 Form U) SPDT (1 Form C)			
Ratings	Resistive load:			
	Max. switched power: 280 W, 1250 VA Max. switched voltage: 50 VDC* or 250 VAC			
	* Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.			
	20 A at 14 VDC Res. (make) 15 A at 14 VDC Res. (break)			
Material	Silver tin oxide			
Resistance	< 50 milliohms initially (6 V, 1 A voltage drop method)			

# COIL

Power	
At Pickup Voltage (typical)	222 mW
Max. Continuous Dissipation	1.09 W at 20°C (68°F) ambient
Temperature Rise	44°C (79°F) at nominal coil voltage
Max Temperature	105°C (221°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**

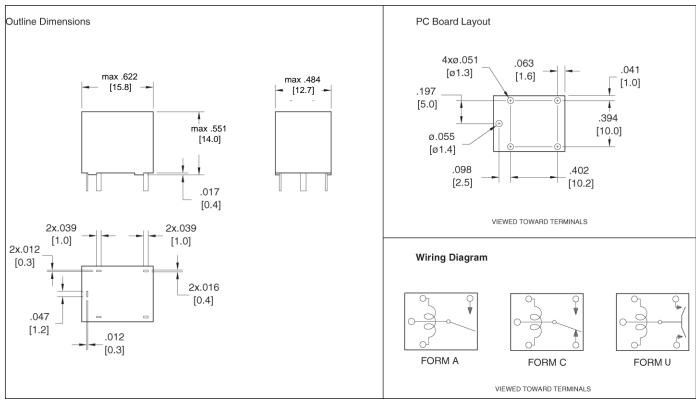
Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 20 A 14 VDC Res.		
Operate Time (max.)	10 ms max. at nominal coil voltage		
Release Time (max.)	5 ms max. at nominal coil voltage (with no coil suppression)		
Dielectric Strength (at sea level for 1 min.)	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 5% of nominal coil voltage		
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)		
Vibration	0.062" (1.5 mm) DA at 10-55 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 Seconds		
Weight	6 g		

### **RELAY ORDERING DATA**

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm ± 10%	SPST	SPDT
6	3.6	8.1	60	AZ947-1A-6D	AZ947-1C-6D
9	5.4	12.2	135	AZ947-1A-9D	AZ947-1C-9D
12	7.3	16.2	240	AZ947-1A-12D	AZ947-1C-12D
24	14.4	32.5	960	AZ947-1A-24D	AZ947-1C-24D

<sup>\*</sup> For 1U version, replace 1A or 1C with 1U. Add suffix "E" for epoxy sealed version.

### **MECHANICAL DATA**



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