

# AZ9321

## 20 AMP MINIATURE PC BOARD RELAY

### FEATURES

- High performance
- 6 kV lightning surge withstand
- Flux tight and sealed versions available
- Class F insulation system standard
- UL, CUR file E44211



### CONTACTS

<b>Arrangement</b>	SPST - N.O. (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	Form A and C Max. switched power: 480 W or 4709 VA Max. switched current: 16 A DC, 20 A AC Max. switched voltage: 30 VDC or 277 VAC
<b>Rated Load</b>	1 Form A
<b>UL/CUR</b>	20 A at 125 VAC, Res., 100k cycles [1][2] 17 A at 277 VAC, Res., 100k cycles [1] 15 A at 125 VAC, Res., 100k cycles [1][2] 1HP at 250 VAC [1][2] 1HP at 125 VAC [1]
<b>UL/CUR Pending</b>	1 Form C 20 A at 125 VAC, Res., 50K cycles 16 A at 277 VAC, Res., 50K cycles 1HP / 1/2 HP at 250 VAC N.O./N.C. 1HP / 1/2 HP at 125 VAC N.O./N.C.
<b>Material</b>	Silver tin oxide [1] or silver nickel [2] (gold plating available)
<b>Resistance</b>	< 100 milliohms initially

### COIL

<b>Power</b> At Pickup Voltage Max Continuous Dissipation	203 mW .5 W at 20°C (68°F)
<b>Temperature Rise</b> (at nominal coil voltage)	27°C (49°F)
<b>Temperature</b>	Max. 155°C (311°F)

### GENERAL DATA

<b>Life Expectancy</b> Mechanical Electrical	1x10 <sup>7</sup> 5 x 10 <sup>4</sup> at 20 A 120 VAC Res.
<b>Operate Time</b>	10 ms max.
<b>Release Time</b>	5 ms max. (with no coil suppression)
<b>Dielectric Strength</b> (at sea level for 1 min.)	3000 Vrms contact to coil 1000 Vrms across contacts
<b>Insulation Resistance</b>	100 megohms min. at 500 VDC, 50% RH
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature</b> Operating Storage	At nominal coil voltage -40°C(-40°F) to 85°C(185°F) -40°C(-40°F) to 155°C(311°F)
<b>Vibration</b>	0.062" DA at 10–55 Hz
<b>Shock</b>	10 g
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solder Temp.</b>	270°C (500°F)
<b>Max. Solder Time</b>	5 seconds
<b>Max. Solvent Temp.</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 seconds
<b>Weight</b>	14 g

### NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Unsealed relays should not be dip cleaned.



**AMERICAN ZETTLER, INC.** [www.azettler.com](http://www.azettler.com)

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

# AZ9321

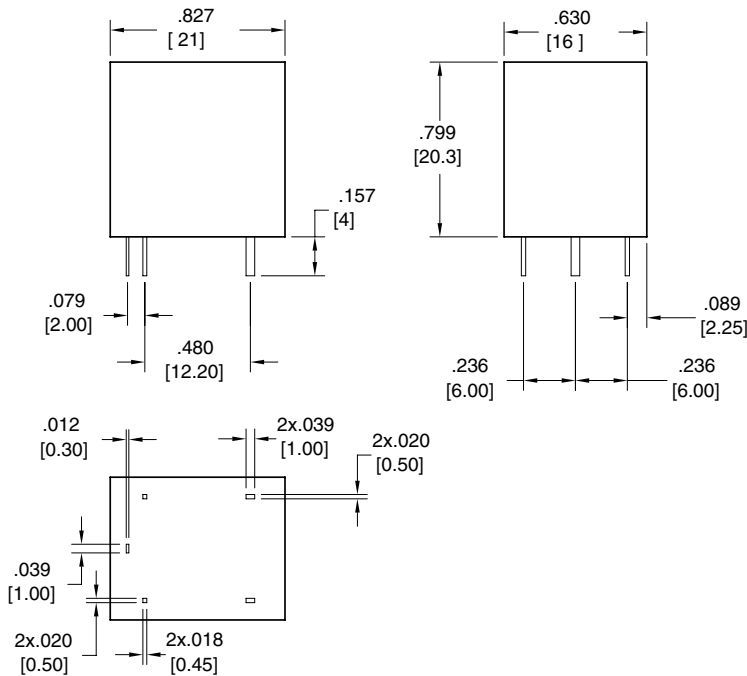
## RELAY ORDERING DATA

STANDARD RELAYS				ORDER NUMBER*	
COIL SPECIFICATIONS				1 Form A (SPST-N.O.)	1 Form C (SPDT)
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance	Must Operate VDC		
5	6.0	70 ±10%	3.8	AZ9321-1A-5DF	AZ9321-1C-5DF
6	7.2	100 ±10%	4.5	AZ9321-1A-6DF	AZ9321-1C-6DF
9	10.8	225 ±10%	6.8	AZ9321-1A-9DF	AZ9321-1C-9DF
12	14.4	400 ±10%	9.0	AZ9321-1A-12DF	AZ9321-1C-12DF
18	21.6	900 ±10%	13.5	AZ9321-1A-18DF	AZ9321-1C-18DF
24	28.8	1,600 ±15%	18.0	AZ9321-1A-24DF	AZ9321-1C-24DF
48	57.6	4,500 ±15%	36.0	AZ9321-1A-48DF	AZ9321-1C-48DF

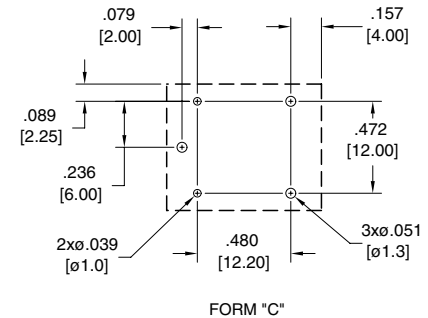
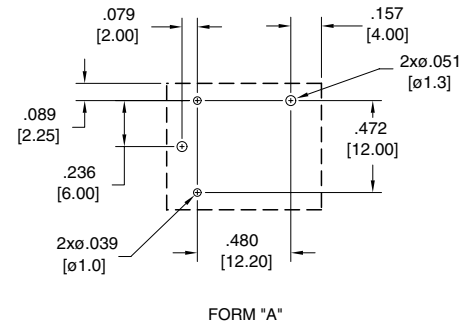
\*Replace "-1A" or "-1C" with "-1AE" or "-1CE" for silver tin oxide contacts. Replace "F" with "EF" for epoxy sealed version.  
 Replace "F" or "EF" with "AF" or "AEF" for gold plated contacts.

## MECHANICAL DATA

### Outline Dimensions



### PC Board Layout



### Wiring Diagram



**AMERICAN ZETTLER, INC.**

[www.azettler.com](http://www.azettler.com)

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM