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, TÜV 50100775

CONTACTS

Arrangement	SPST - N.O. (1 Form A) SPDT (1 Form C)
Ratings	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
Rated Load	
UL/CUR	1 Form A 20 A at 125 VAC, Res., 100k cycles [1][2] 17 A at 277 VAC, Res., 100k cycles [2] 15 A at 125 VAC, Res., 100k cycles [1][2] 16 A at 250 VAC, Res., 50k cycles [1] 1HP at 250 VAC [1][2] 1HP at 125 VAC [2] TV-8 at 125 VAC [1] 1 Form C 20 A at 125 VAC Res. 100k cycles N.O. [1][2] 20 A at 125 VAC Res. 50k cycles N.C.[2] 20 A at 125 VAC Res. 17k cycles N.C.[1] 17 A at 125 VAC Res. 50k cycles N.C.[1] 17 A at 277 VAC Res. 100k cycles N.O. [2] 15 A at 277 VAC Res. 50k cycles N.C. [2] 1 HP at 250 VAC N.O. [1][2] 1 HP at 125 VAC N.O. [2] 1/2 HP at 125 VAC N.C. [2] 1/2 HP at 277 VAC N.C. [2] TV-8 at 125 VAC N.O./ N.C. [1]
TÜV	1 Form A 20 A at 125 VAC Res., 80k cycles [1][2] 16 A at 250 VAC Res., 80k cycles [1][2] 1 Form C 16 A at 250 VAC N.O. Res., 50k cycles[1][2] 10 A at 250 VAC N.C. Res., 50k cycles[1][2]
Material	Silver tin oxide [1] or silver nickel [2] (gold plating available)

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	 $1x10^7$ 5×10^4 at 20 A 120 VAC Res.
Operate Time	10 ms max.
Release Time	5 ms max. (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	3000 Vrms contact to coil 1000 Vrms across contacts
Insulation Resistance	100 megohms min. at 500 VDC, 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature **Operating** **Storage**	At nominal coil voltage -40°C(-40°F) to 95°C(203°F) -40°C(-40°F) to 155°C(311°F)
Vibration	0.062" DA at 10–55 Hz
Shock	10 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (500°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	14 g

COIL

Power **At Pickup Voltage** **Max Continuous Dissipation**	 203 mW 1.4 W at 20°C (68°F)
Temperature Rise **(at nominal coil voltage)**	20°C (36°F)
Temperature	Max. 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. Unsealed relays should not be dip cleaned.
4. Specifications subject to change without notice.

AMERICAN ZETTLER, INC. *www.azettler.com*

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

AZ9321

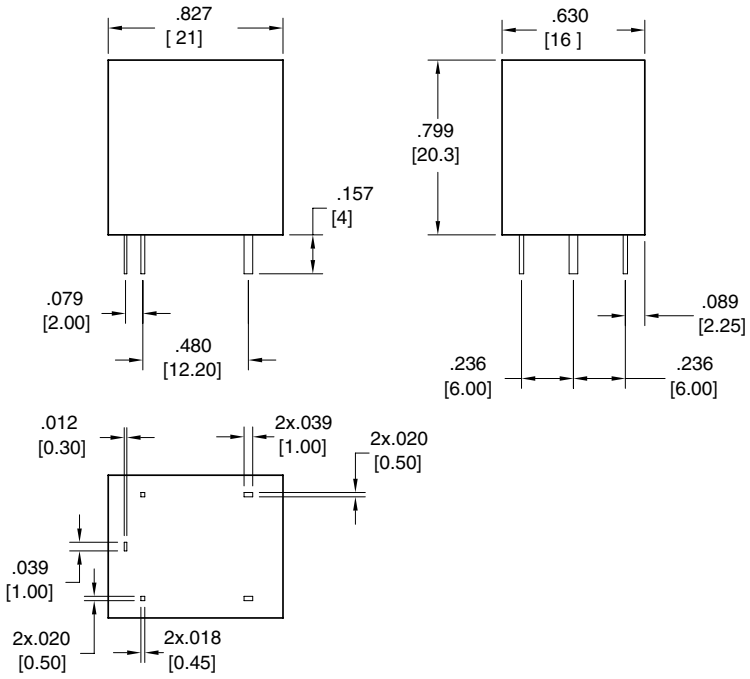
RELAY ORDERING DATA

STANDARD RELAYS					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance	Must Operate VDC	1 Form A (SPST-N.O.)	1 Form C (SPDT)
5	10.0	70 ±10%	3.8	AZ9321–1A–5DF	AZ9321–1C–5DF
6	12.0	100 ±10%	4.5	AZ9321–1A–6DF	AZ9321–1C–6DF
9	18.0	225 ±10%	6.8	AZ9321–1A–9DF	AZ9321–1C–9DF
12	24.0	400 ±10%	9.0	AZ9321–1A–12DF	AZ9321–1C–12DF
18	36.0	900 ±10%	13.5	AZ9321–1A–18DF	AZ9321–1C–18DF
24	48.0	1,600 ±15%	18.0	AZ9321–1A–24DF	AZ9321–1C–24DF
48	80.4	6,400 ±15%	36.0	AZ9321–1A–48DF	AZ9321–1C–48DF

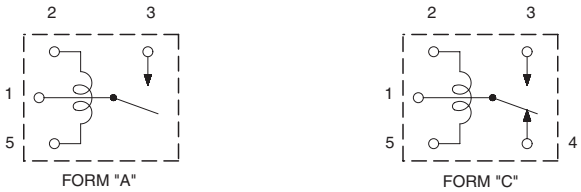
*Replace “-1A ” or “-1C “ with “-1AE “ or “-1CE “ for silver tin oxide contacts. Replace “F” with “EF” for epoxy sealed version.
Replace “F” or “EF” with “AF” or “AEF” for gold plated contacts.

MECHANICAL DATA

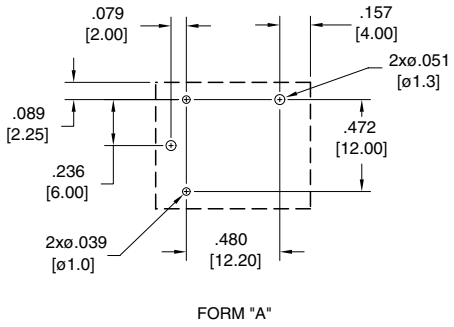
Outline Dimensions

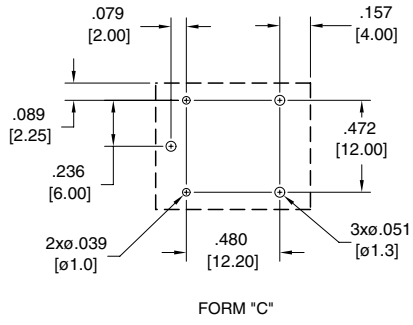


Wiring Diagram



PC Board Layout





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