AZ6961

10 AMP SUBMINIATURE POWER RELAY

FEATURES

- High sensitivity, 120 mW pickup
- Dielectric strength 5000 Vrms
- Isolation spacing greater than 8 mm
- 10 Amp switching capability
- Class B insulation standard, Class F version available
- Epoxy sealed version for automatic wave soldering and cleaning available
- UL, CUR file E44211
- VDE 131637ÜG

CONTACTS

Arrangement	SPDT (1 Form C) SPST (1 Form A)
Ratings	Resistive load: Max. switched power: 240 W or 2500 VA Max. switched current: 10 A Max. switched voltage: 240* VDC or 440 VAC **UL, CUR Rating:** 10 A at 250 VAC resistive [1] 8 A at 30 VDC/250 VAC [1] 8 A at 30 VDC/250 VAC, 100k cycles [2] B300 Pilot Duty [1] R300 Pilot Duty [1] 1/4 HP at 125 VAC [1] 1/2 HP at 250 VAC [1] **VDE Rating:** 8 A at 250 VAC *Note: if switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Material	Silver cadmium oxide (AgCdO) [1] Silver tin oxide ($AgSnO_2$) [2] Gold plating available
Resistance	< 100 milliohms initially

COIL

Power	
At Pickup Voltage (typical)	120 mW
Max. Continuous Dissipation	1.2 W at 20°C (68°F) ambient
Temperature Rise	20°C (36°F) at nominal coil voltage
Temperature	Max. 130°C (266°F) Class B Max. 155°C (311°F) Class F

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 10 million 3 X 10^5 at 8 A 240 VAC res.
Operate Time (typical)	7 ms at nominal coil voltage
Release Time (typical)	3 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000 Vrms coil to contact 1000 Vrms between open contacts
Insulation Resistance	1000 megohms min. at 20°C, 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 100°C (212°F) -40°C (-40°F) to 130°C (266°F) Class B -40°C (-40°F) to 155°C (311°F) Class F
Vibration	Break Contact: 5g at 10...500 Hz Make Contact: 20g at 10...500 Hz
Shock	10 g
Enclosure	P.B.T. polyester, UL94 V-0
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	8 grams

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.
4. Class F version not VDE approved

AZ6961

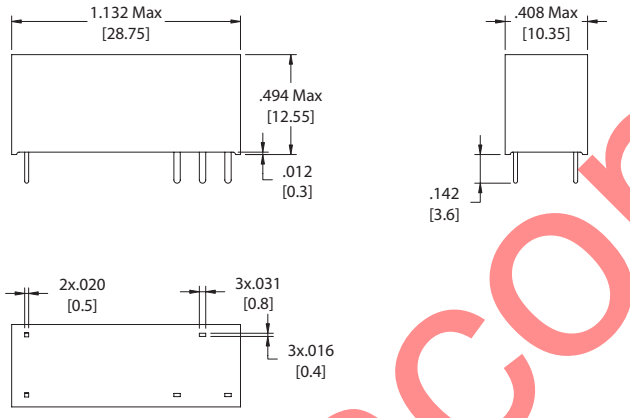
RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance	Must Operate VDC	1 Form A (SPST-NO)	1 Form C (SPDT)
5	11.6	113 ± 10%	3.5	AZ6961–1A–5D	AZ6961–1C–5D
6	14.0	164 ± 10%	4.2	AZ6961–1A–6D	AZ6961–1C–6D
12	27.2	617 ± 10%	8.4	AZ6961–1A–12D	AZ6961–1C–12D
24	53.1	2350 ± 10%	16.8	AZ6961–1A–24D	AZ6961–1C–24D
48	107.3	9600 ± 15%	33.6	AZ6961–1A–48D	AZ6961–1C–48D
60	122.4	12500 ± 15%	42.0	AZ6961–1A–60D	AZ6961–1C–60D

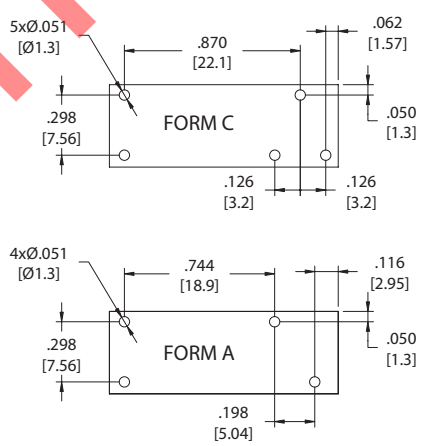
*Add “E” to “-1A” or “-1C” for $AgSnO_2$ contacts. Add suffix “E” for sealed version. Add suffix “A” for gold plated contacts. Add suffix “F” for Class F version.

MECHANICAL DATA

FORM C VERSION

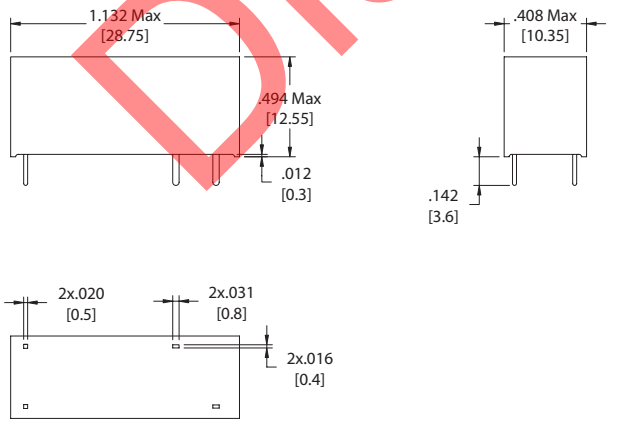


PC BOARD LAYOUT

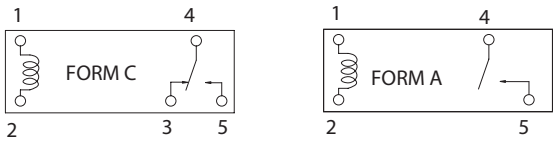


VIEWED TOWARD TERMINALS

FORM A VERSION



CIRCUIT DIAGRAM



VIEWED TOWARD TERMINALS

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