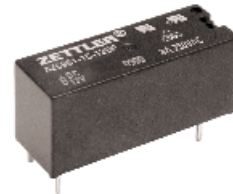


AZ6961

8 AMP SUBMINIATURE POWER RELAY

FEATURES

- High sensitivity, 120 mW pickup
- Dielectric strength 5000 Vrms
- Isolation spacing greater than 8 mm
- 8 Amp switching capability
- Class B insulation standard, Class F version available
- Epoxy sealed version for automatic wave soldering and cleaning available
- UL, CUR, file E43203
- VDE 131637ÜG



CONTACTS

Arrangement	SPDT (1 Form C) SPST (1 Form A)
Ratings	Resistive load: Max. switched power: 240 W or 2000 VA Max. switched current: 8 A Max. switched voltage: 240* VDC or 440 VAC UL, CUR Rating: 8 A at 30 VDC / 250 VAC 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 Silver tin oxide available upon request
Resistance	< 100 milliohms initially

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 10 million 1 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
Insulation (according to DIN VDE 0110, IEC 60664-1)	C250 Overvoltage category: III Pollution degree: 3 Nominal voltage: 250 VAC
Dropout	Greater than 10% 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 85°C (185°F)
Vibration	Break Contact: 5 g at 10 ...500 Hz Make Contact: 20 g at 10...500 Hz
Shock	10 g
Enclosure	P.B.T. polyester, UL94 V-O
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

COIL

Power	
At Pickup Voltage (typical)	120 mW
Max. Continuous Dissipation	1.4 W at 20°C (68°F) ambient 1.1 W at 40°C (104°F) ambient
Temperature Rise	20°C (36°F) at nominal coil voltage
Temperature	Max. 130°C (266°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.
4. Class F version not VDE approved.

ZETTLER electronics

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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	11.8	113 ± 10%	3.5	AZ6961-1A-5D	AZ6961-1C-5D
6	14.1	164 ± 10%	4.2	AZ6961-1A-6D	AZ6961-1C-6D
12	28.2	617 ± 10%	8.4	AZ6961-1A-12D	AZ6961-1C-12D
24	56.4	2350 ± 10%	16.8	AZ6961-1A-24D	AZ6961-1C-24D
48	112.8	9600 ± 15%	33.6	AZ6961-1A-48D	AZ6961-1C-48D
60	141.0	12500 ± 15%	42.0	AZ6961-1A-60D	AZ6961-1C-60D

*Add suffix "E" for sealed version. Add suffix "F" for Class F version.

MECHANICAL DATA

FORM C VERSION

Top view dimensions: 1.122 [28.5] (width), .484 [12.3] (height), .142 [3.6] (terminal height).
 Side view dimensions: .398 [10.1] (width), .142 [3.6] (terminal height).
 Terminal view dimensions: 2 x .020 [0.5] (terminal width), 3 x .016 [0.4] (terminal spacing), 3 x .031 [0.8] (terminal length).

PC BOARD LAYOUT

Form C layout dimensions: 5 x ø.051 [ø1.3] (terminal diameter), .870 [22.1] (terminal spacing), .062 [1.57] (terminal offset), .298 [7.56] (terminal height), .126 [3.2] (terminal offset), .050 [1.3] (terminal offset).
 Form A layout dimensions: 4 x ø.051 [ø1.3] (terminal diameter), .744 [18.9] (terminal spacing), .116 [2.95] (terminal offset), .298 [7.56] (terminal height), .198 [5.04] (terminal offset), .050 [1.3] (terminal offset).

FORM A VERSION

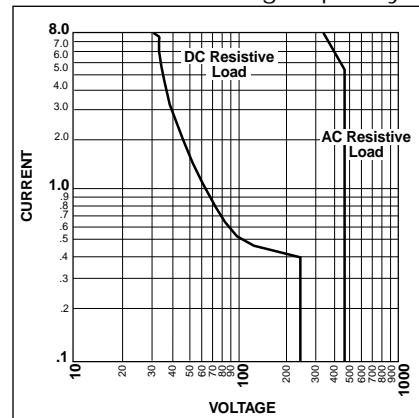
Top view dimensions: 1.122 [28.5] (width), .484 [12.3] (height), .142 [3.6] (terminal height).
 Side view dimensions: .398 [10.1] (width), .142 [3.6] (terminal height).
 Terminal view dimensions: 2 x .020 [0.5] (terminal width), 2 x .016 [0.4] (terminal spacing), 2 x .031 [0.8] (terminal length).

CIRCUIT DIAGRAM

Form C diagram: Terminal 1 is coil, 2 is common, 3 and 5 are normally open contacts, 4 is normally closed contact.
 Form A diagram: Terminal 1 is coil, 2 is common, 3 is normally open contact, 4 is normally closed contact.

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

Maximum Switching Capacity



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