AZ8A

MINIATURE PC BOARD RELAY

FEATURES

- Subminiature size
- High sensitivity, 110 mW pickup
- Coils to 48 VDC
- · Epoxy sealed for automatic wave soldering
- Contacts rated at 10 Amps
- · Life expectancy to 20 million operations
- Extremely low cost
- Class B insulation (130°C) standard
- Class F insulation (155°C) version available
- UL, CUR file E44211

CONTACTS

Arrangement	SPDT (1 Form C)			
Ratings	Resistive load:			
UL Rating	Max. switched power: 300 W or 2400 VA Max. switched current: 10 A Max. switched voltage: 150* VDC or 300 VAC 10 A at 240 VAC General Use 6 A at 30 VDC Resistive 6 A at 300 VAC Resistive Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory			
Material	Silver alloy			
Resistance	< 100 milliohms initially			

COIL

Power At Pickup Voltage (typical)	Standard coil: 250 mW (48V coil: 341mW) Sensitive coil: 175 mW			
Max. Continuous Dissipation	Class B: 2.0 W 20°C (68°F) ambient 1.6 W 40°C (104°F) ambient Class F: 2.5 W 20°C (68°F) ambient 2.1 W 40°C (104°F) ambient			
Temperature Rise	At nominal coil voltage Standard coil: 38°C (68°F) Sensitive coil: 28°C (50°F)			
Temperature	Max. 130°C (266°F) Class B Max. 155°C (311°F) Class F			

NOTES

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Other coil resistances and sensitivities available upon request.
- 4. Unsealed relays should not be dip cleaned.
- 5. Specifications subject to change without notice.



GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 100 million operations 1 x 10 ⁵ at 6 A, 120 VAC			
Operate Time (typical)	5 ms at nominal coil voltage			
Release Time (typical)	2 ms at nominal coil voltage (with no coil suppression)			
Dielectric Strength (at sea level for 1 min.)	750 Vrms contact to contact 2500 Vrms contact to coil			
Insulation Resistance	1000 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 -55°C (-67°F) to 90°C (194°F) Class B -55°C (-67°F) to 115°C (239°F) Class F -55°C (-67°F) to 130°C (266°F) Class B -55°C (-67°F) to 155°C (311°F) Class F			
Vibration	0.062" DA at 10–55 Hz, 10 g at 55–110 Hz			
Shock	10 g			
Enclosure	PBT 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	8 grams			

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COIL SPECIFICATIONS								
STANDARD RELAYS: 1 Form C (SPDT)				ORDER NUMBER*				
Nominal Coil VDC	Max. VDC Continuous	Resistance ± 10%	Must Operate VDC	Unsealed	Epoxy Sealed			
5	10.6	56	3.75	AZ8A-1CH-5D	AZ8A-1CH-5DE			
6	12.6	80	4.50	AZ8A–1CH–6D	AZ8A-1CH-6DE			
9	19.0	180	6.75	AZ8A-1CH-9D	AZ8A-1CH-9DE			
12	25.0	320	9.00	AZ8A-1CH-12D	AZ8A-1CH-12DE			
24	50.0	1,280	18.00	AZ8A-1CH-24D	AZ8A-1CH-24DE			
48	87.0	3,800	36.00	AZ8A-1CH-48D	AZ8A-1CH-48DE			
SENSITIVE RELAYS: 1 Form C (SPDT) ORDER NUMBER*								
Nominal Coil VDC	Max. VDC Continuous	Resistance ± 10%	Must Operate VDC	Unsealed	Epoxy Sealed			
5	12.6	80	3.75	AZ8A-1CH-5DS	AZ8A-1CH-5DSE			
6	14.8	110	4.50	AZ8A-1CH-6DS	AZ8A-1CH-6DSE			
9	22.4	250	6.75	AZ8A-1CH-9DS	AZ8A-1CH-9DSE			
12	30.0	440	9.00	AZ8A-1CH-12DS	AZ8A-1CH-12DSE			
24	60.0	1,780	18.00	AZ8A-1CH-24DS	AZ8A-1CH-24DSE			

RELAY ORDERING DATA

*To indicate Class F version, add suffix "F". Other coil resistances and sensitivities available. Please contact the factory. When suffix "E" is specified for Epoxy Seal, refer to AZ "Relay Technical Notes" on AZ website - Product Resources. Consult factory for other PCB process conditions that may apply.

MECHANICAL DATA



If no tolerance is shown in outline dimension: dimension <=1mm, tolerance is ± 0.2 mm; outline dimension >1mm and <= 5mm, tolerance is ± 0.3 mm; outline dimension > 5mm, tolerance is ± 0.4 mm.

Coil Temperature Rise



Maximum Switching Capacity



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