

MINIATURE PC BOARD RELAY

FEATURES

- Subminiature size
- High sensitivity, 110mW pickup
- Coils to 48VDC
- 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: Max. switched power: 300W or 2400VA Max. switched current: 10A Max. switched voltage: 150* VDC or 300VAC
UL Rating	10A at 240VAC General Use 6A at 30VDC Resistive 6A at 300VAC Resistive Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Material	Silver alloy
Resistance	< 100 milliohms initially

COIL

Power At Pickup Voltage (typical)	Standard coil: 250mW (48V coil: 341mW) Sensitive coil: 175mW
Max. Continuous Dissipation	Class B: 2.0W 20°C (68°F) ambient 1.6W 40°C (104°F) ambient Class F: 2.5W 20°C (68°F) ambient 2.1W 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

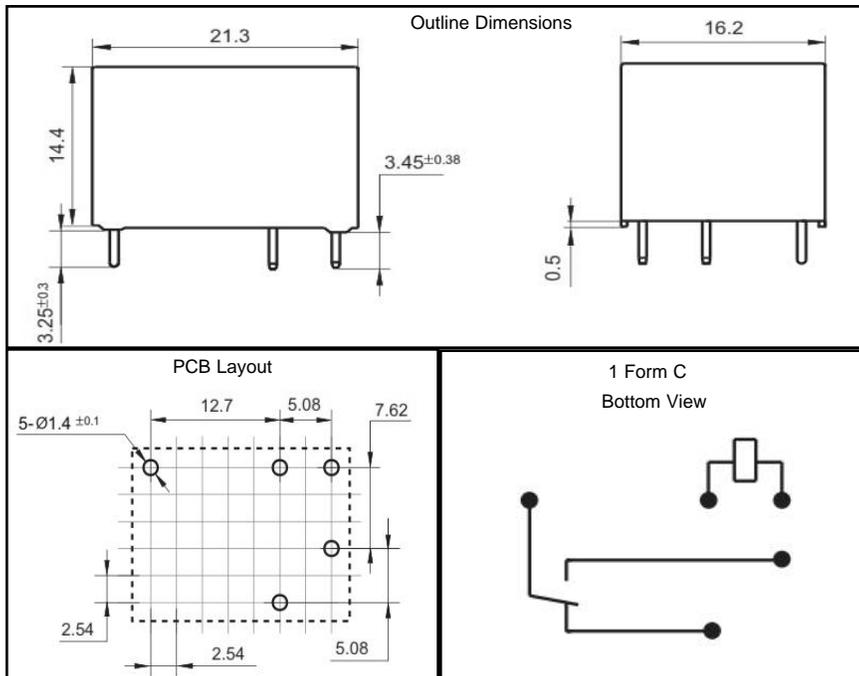
Life Expectancy	Minimum operations
Mechanical	100 million operations
Electrical	1 x 10 ⁵ at 6A, 120VAC
Operate Time (typical)	5ms at nominal coil voltage
Release Time (typical)	2ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	750Vrms contact to contact 2500Vrms contact to coil
Insulation Resistance	1000 megohms min. at 20°C, 500VDC, 50% RH
Dropout	Greater than 5% of nominal coil voltage
Ambient Temperature Operating	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
Storage	-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	10g
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

RELAY ORDERING DATA

COIL SPECIFICATIONS					
STANDARD RELAYS: 1 Form C (SPDT)				ORDER NUMBER*	
Nominal Coil VDC	Max. VDC Continuous	Resistance $\pm 10\%$	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 $\pm 10\%$	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

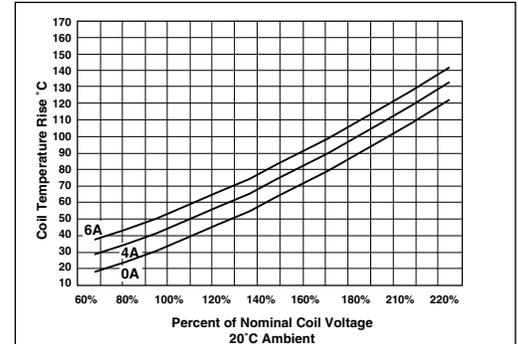
*To indicate Class F version, add suffix "F". Other coil resistances and sensitivities available. Please contact the factory. When suffix "E" is specified for Epoxy Seal, refer to AZ "Relay Technical Notes" on AZ website - Product Resources. Consult factory for other PCB process conditions that may apply.

MECHANICAL DATA



If no tolerance is shown in outline dimension: dimension $\leq 1\text{mm}$, tolerance is $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance is $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance is $\pm 0.4\text{mm}$.

Coil Temperature Rise



Maximum Switching Capacity

