

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 3, 6 or 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
- VDE approved versions available

CONTACTS

Arrangement	SPDT (1 Form C) SPST (1 Form A) 10 A version only
Ratings Light Duty	Resistive load: Max. switched power: 100 W or 600 VA Max. switched current: 3 A Max. switched voltage: 150* VDC or 300 VAC UL Rating: 2 A at 28 VDC or 300 VAC 1/8 HP 120 VAC 1/10 HP 120/240 VAC (100,000 cyc) 1.2/0.6 A at 120/240 VAC, pilot duty 100,000 cyc 3.0/1.5 A at 120/240 VAC general use 100,000 cyc
Medium Duty	Max. switched power: 180 W or 1800 VA Max. switched current: 6 A Max. switched voltage: 150* VDC or 300 VAC UL Rating: 6 A at 28 VDC or 300 VAC 1/8 HP 120/240 VAC (100,000 cyc) 1.5/0.8 A at 120/240 VAC, pilot duty 100,000 cyc 3.8/1.9 A at 120/240 VAC general use 100,000 cyc
Heavy Duty	Max. switched power: 300 W or 2400 VA Max. switched current: 10 A Max. switched voltage: 150* VDC or 300 VAC UL Rating: 10 A at 30 VDC or 120 VAC 1/4 HP 120 VAC, 1/2 HP 250 VAC Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Material	Light duty: Silver Medium duty: Silver nickel Heavy duty: Silver cadmium oxide
Resistance	< 100 milliohms initially

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.

COIL

Power At Pickup Voltage (typical)	Standard coil: 210 mW Sensitive coil: 140 mW Heavy duty: 228 mW (110 mW available)
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

GENERAL DATA

Life Expectancy Mechanical	Minimum operations 100 million operations
Electrical Light Duty Medium Duty Heavy Duty	3 x 10 ⁵ at 3 A, 120 VAC 1.8 x 10 ⁵ at 6 A, 120 VAC 1 x 10 ⁵ at 10 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 3000 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	P.E.T. 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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12/16/98W

AZ8

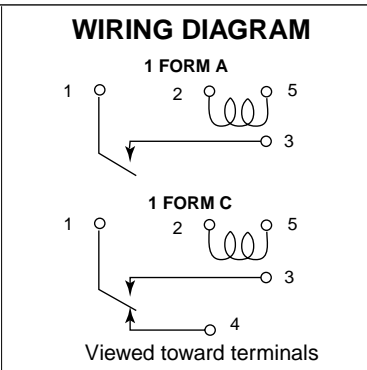
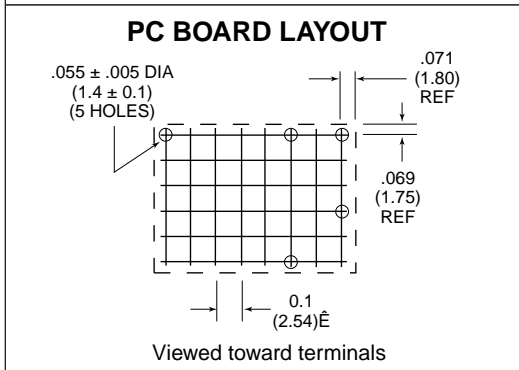
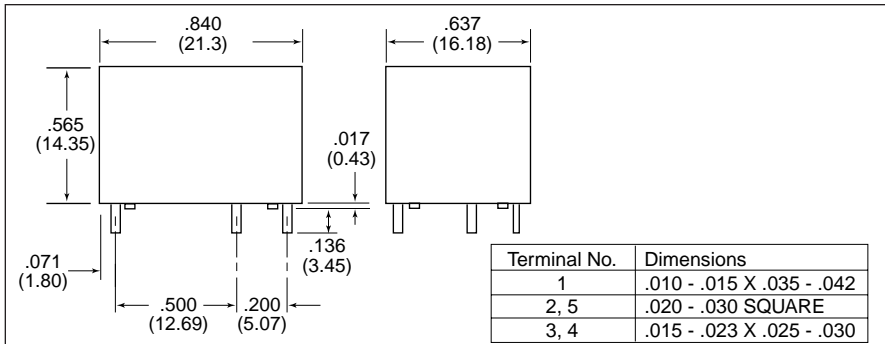
RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*			
STANDARD RELAYS: 1 Form C (SPDT)				LIGHT DUTY (3 Amp contact)		MEDIUM DUTY (6 Amp contact)	
Nominal Coil VDC	Max. VDC Continuous	Resistance $\pm 10\%$	Must Operate VDC	Unsealed	Epoxy Sealed	Unsealed	Epoxy Sealed
5	10.6	56	3.25	AZ8-1C-5D	AZ8-1C-5DE	AZ8-1CH-5D	AZ8-1CH-5DE
6	12.6	80	3.90	AZ8-1C-6D	AZ8-1C-6DE	AZ8-1CH-6D	AZ8-1CH-6DE
9	19.0	180	5.85	AZ8-1C-9D	AZ8-1C-9DE	AZ8-1CH-9D	AZ8-1CH-9DE
12	25.0	320	7.80	AZ8-1C-12D	AZ8-1C-12DE	AZ8-1CH-12D	AZ8-1CH-12DE
24	50.0	1,280	15.60	AZ8-1C-24D	AZ8-1C-24DE	AZ8-1CH-24D	AZ8-1CH-24DE
48	87.0	3,800	28.80	AZ8-1C-48D	AZ8-1C-48DE	AZ8-1CH-48D	AZ8-1CH-48DE
SENSITIVE RELAYS: 1 Form C (SPDT)				LIGHT DUTY (3 Amp contact)		MEDIUM DUTY (6 Amp contact)	
Nominal Coil VDC	Max. VDC Continuous	Resistance $\pm 10\%$	Must Operate VDC	Unsealed	Epoxy Sealed	Unsealed	Epoxy Sealed
5	12.6	80	3.25	AZ8-1C-5DS	AZ8-1C-5DSE	AZ8-1CH-5DS	AZ8-1CH-5DSE
6	14.8	110	3.90	AZ8-1C-6DS	AZ8-1C-6DSE	AZ8-1CH-6DS	AZ8-1CH-6DSE
9	22.4	250	5.85	AZ8-1C-9DS	AZ8-1C-9DSE	AZ8-1CH-9DS	AZ8-1CH-9DSE
12	30.0	440	7.80	AZ8-1C-12DS	AZ8-1C-12DSE	AZ8-1CH-12DS	AZ8-1CH-12DSE
24	60.0	1,780	15.60	AZ8-1C-24DS	AZ8-1C-24DSE	AZ8-1CH-24DS	AZ8-1CH-24DSE
STANDARD RELAYS: 1 Form C (SPDT)				HEAVY DUTY (10 Amp contact)			
Nominal Coil VDC	Max. VDC Continuous	Resistance $\pm 10\%$	Must Operate VDC	Unsealed		Epoxy Sealed	
5	10.6	56	4.0	AZ8-1CT-5D*		AZ8-1CT-5DE*	
6	12.6	80	4.8	AZ8-1CT-6D		AZ8-1CT-6DE	
9	19.0	180	7.2	AZ8-1CT-9D		AZ8-1CT-9DE	
12	25.0	320	9.6	AZ8-1CT-12D		AZ8-1CT-12DE	
24	50.0	1,280	19.2	AZ8-1CT-24D		AZ8-1CT-24DE	
48	87.0	3,800	38.4	AZ8-1CT-48D		AZ8-1CT-48DE	

*To indicate Class F version, add suffix "F". Other coil resistances and sensitivities available. Please contact the factory.

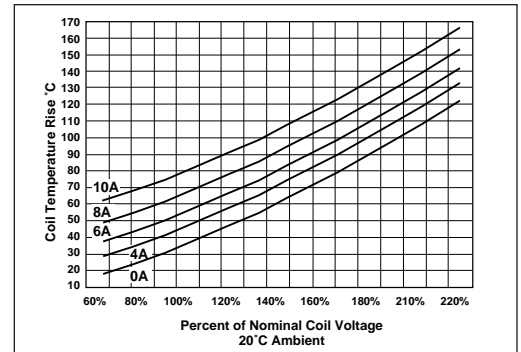
Substitute "1AT" in place of "1CT" to indicate 1 Form A.

MECHANICAL DATA

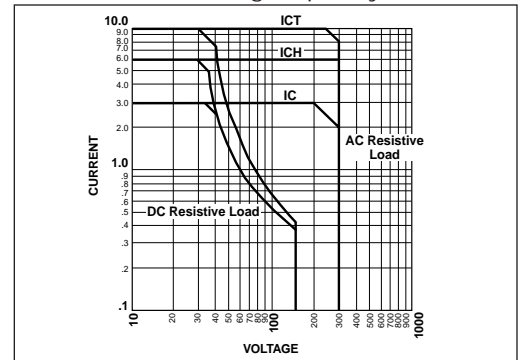


Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010$ "

Coil Temperature Rise



Maximum Switching Capacity



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