AZ991

MINIATURE PC BOARD RELAY

FEATURES

- Contacts rated at 3, 5 or 10 Amps
- Meets FCC Part 68.302 1500 lightning surge
- Meets FCC Part 68.304 1000 V dielectric
- 0.240" (6.1 mm) min. between coil and contact
- Low cost
- DC coils to 48 VDC
- Flux-tight available
- UL, CUR file E44211

CONTACTS

Arrangement	SPDT (1 Form C) (Form A available on request)		
Ratings	Resistive load:		
Light Duty	Max. switched power: 90 W or 831 VA Max. switched current: 3 A Max. switched voltage: 30 VDC or 277 VAC UL Rating: 3 A at 30 VDC or 277 VAC		
Medium Duty	Max. switched power: 150 W or 1250 VA Max. switched current: 5 A Max. switched voltage: 30 VDC or 277 VAC UL Rating: 5 A at 30 VDC or 277 VAC 1/10 HP 277 VAC		
Heavy Duty	Max. switched power: 300 W or 1250 VA Max. switched current: 10 A Max. switched voltage: 30 VDC or 125 VAC UL Rating: 5 A at 30 VDC or 10 A 125 VAC		
Material	Silver cadmium oxide		
Resistance	< 100 milliohms initially		

COIL

Power			
At Pickup Voltage (typical)	256 mW		
Max. Continuous Dissipation	1.1 W at 20°C (68°F) ambient 0.86 W at 40°C (104°F) ambient		
Temperature Rise	30°C (54°F) at nominal coil voltage		
Temperature	Max. 105°C (267°F)		



GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ at 10 A 120 VAC Res.		
Operate Time (typical)	6 ms at nominal coil voltage		
Release Time (typical)	2 ms at nominal coil voltage		
Dielectric Strength (at sea level for 1 min.)	2500 Vrms contact to coil 750 Vrms across contacts Meets FCC Part 68.302 lightning surge Meets FCC Part 68.304 1000 V dielectric		
Insulation Resistance	100 megohms min. at 500 VDC, 20°C 50% RH		
Dropout	Greater than 10% of nominal coil voltage		
Ambient Temperature Operating Storage	-40°C (-13°F) to 70°C (158°F) -55°C (-67°F) to 105°C (221°F)		
Vibration	0.062" DA at 10–55 Hz		
Shock	10 g		
Enclosure	P.B.T. polyester		
Terminals	Tinned copper alloy, P.C.		
Max. Solder Temp.	270°C (500°F)		
Max. Solder Time	5 seconds		
Max. Solvent Temp.	80°C (176°F)		
Max. Immersion Time	30 seconds		
Weight	10 grams		

NOTES

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Unsealed version available upon request.
- 4. Tape should be pulled off after wave solder and cleaning.
- 5. Specifications subject to change without notice.





www.azettler.com

AZ991

RELAY ORDERING DATA

* Add suffix "L" for flux-tight version

5

3

1

0.5

Current

Maximum Switching Capacity

30 50

100

Voltage

200 250

AC RESISTIVE

STANDARD RE	LAYS: Light Duty	(3 Amp Contact)		
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	ORDER NUMBER*
5	8.4	63	4.0	AZ991-1C-5D
6	10.0	90	4.8	AZ991–1C–6D
9	15.1	202	7.2	AZ991-1C-9D
12	20.2	360	9.6	AZ991-1C-12D
24	40.3	1,440	19.2	AZ991–1C–24D
48	80.7	5,760	38.4	AZ991-1C-48D
STANDARD RE	LAYS: Medium D	uty (5 Amp Conta	act)	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	ORDER NUMBER*
5	8.4	63	4.0	AZ991-1CH-5D
6	10.0	90	4.8	AZ991–1CH–6D
9	15.1	202	7.2	AZ991-1CH-9D
12	20.2	360	9.6	AZ991-1CH-12D
24	40.3	1,440	19.2	AZ991-1CH-24D
48	80.7	5,760	38.4	AZ991–1CH–48D
STANDARD RE	LAYS: Heavy Dut	y (10 Amp Conta	ct)	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	ORDER NUMBER*
5	8.4	63	4.0	AZ991–1CT–5D
6	10.0	90	4.8	AZ991–1CT–6D
9	15.1	202	7.2	AZ991-1CT-9D
12	20.2	360	9.6	AZ991-1CT-12D
24	40.3	1,440	19.2	AZ991-1CT-24D
48	80.7	5,760	38.4	AZ991-1CT-48D

MECHANICAL DATA



viewed toward terminals

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



Coil Temperature Rise vs. Coil Power

80

50

40

30

20

100 110

130

% of Nominal Coil Voltage (at 20°C)

ů

Coil Temperature Rise

5A

ЗA

1.5A

0A

150