



AZ 941 SERIES MINIATURE PCB RELAY

Features

- Contacts Rated at 3, 5 or 12 Amps
- Extremely Low Cost
- Coil Voltages to 48VDC
- Epoxy Sealed for Automatic Wave Soldering
- Life Expectancy to 10 Million Operations
- UL, CUR File E43203
- Meets FCC Part 68.302 1,500V Lightning Surge
- Meets FCC Part 68.304 1,000V Dielectric

Specifications

Contacts

Arrangement	SPDT (1 Form C) Form A available upon request
Rating	Noninductive load
	Max switched power: 90W or 750VA
	Max switched current: 3 Amp
Light Duty	Max switched voltage: 150VDC or 300VAC
	UL Rating: 3A @ 30VDC or 250VAC
	Max switched power: 150W or 1,250VA
Medium Duty	Max switched current: 5 Amp
	Max switched voltage: 150VDC or 300VAC
	UL Rating: 5A @ 30VDC or 125VAC;
Heavy Duty	1/10 HP 125VAC
	Max switched power: 300W or 2,500VA
	Max switched current: 12 Amp
	Max switched voltage: 150VDC or 300VAC
	UL Rating: 5A @ 30VDC or 125VAC;
	10A @ 277VAC;
	12A @ 125VAC;
	1/4 HP 125VAC
Material	Silver Alloy, Gold Clad
Resistance	100 milliohms initially @ 6V, 0.1A

Coil

Power	230mW
at Pickup Voltage	(typical)
Max Continuous	1.1W @ 20C (68F) ambient
Dissipation	0.86W @ 40C (104F) ambient
Temperature Rise	27C (81F) at nominal coil voltage
Temperature	105C (222F) Maximum

General Data

Life Expectancy	Minimum operations 10,000,000
Mechanical	500,000 at rated load
Electrical	6ms at nominal coil voltage (typical)
Operate Time	2 ms at nominal coil voltage with no coil suppression
Release Time	(typical)
Capacitance	1.5pF contact to contact 1.5pF contact set to contact set 2.6pF contact to coil
Bounce	At 10mA contact current 2 ms at operate NO side 3 ms at release NC side
Dielectric Strength	1,500Vrms NC contact to coil (at sea level) 750Vrms contact to contact Meets FCC Part 68.302 1,500V Lightning Surge Meets FCC Part 68.304 1,000V Dielectric
Insulation	100 megohms min @ 20C (68F), Resistance 500VDC, 50% RH
Dropout	> 10% of nominal coil voltage
Ambient Temp	At nominal coil voltage (operating) (storage) -25C (-13F) to 70C (158F) -55C (-67F) to 105C (221F)
Vibration	0.062" DA @ 10-55 Hz
Shock	10g
Enclosure	P.B.T. Polyester
Terminals	Tinned copper alloy, P.C.
Max Solder Temp	270C (518F)
Max Solder Time	5 seconds
Solvent Temp	80C (176F) maximum
Immersion Time	30 seconds maximum
Weight	10 grams

Relay Ordering Data

Standard Relays

Coil Specifications				ORDER NUMBER	
Coil VDC nominal	Max VDC continuous	Coil Resistance	Must Operate VDC	Unsealed	Epoxy Sealed
5	8.9	70	3.5	AZ 941-1C-5D	AZ 941-1C-5DE
6	10.6	100	4.2	AZ 941-1C-6D	AZ 941-1C-6DE
12	21.2	400	8.4	AZ 941-1C-12D	AZ 941-1C-12DE
24	42.5	1,600	16.8	AZ 941-1C-24D	AZ 941-1C-24DE
48	85.0	6,400	33.6	AZ 941-1C-48D	AZ 941-1C-48DE

Light Duty (3 Amp Contact)

Standard Relays

Coil Specifications				ORDER NUMBER	
Coil VDC nominal	Max VDC continuous	Coil Resistance	Must Operate VDC	Unsealed	Epoxy Sealed
5	8.9	70	4.0	AZ 941-1CH-5D	AZ 941-1CH-5DE
6	10.6	100	4.8	AZ 941-1CH-6D	AZ 941-1CH-6DE
12	21.2	400	9.6	AZ 941-1CH-12D	AZ 941-1CH-12DE
24	42.5	1,600	19.2	AZ 941-1CH-24D	AZ 941-1CH-24DE
48	85.0	6,400	38.4	AZ 941-1CH-48D	AZ 941-1CH-48DE

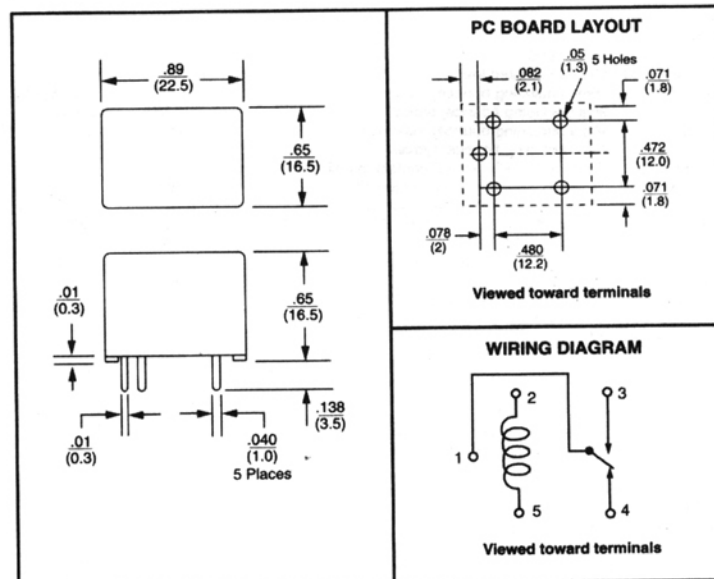
Medium Duty (5 Amp Contact)

Standard Relays

Coil Specifications				ORDER NUMBER	
Coil VDC nominal	Max VDC continuous	Coil Resistance	Must Operate VDC	Unsealed	Epoxy Sealed
5	8.9	70	4.0	AZ 941-1CT-5D	AZ 941-1CT-5DE
6	10.6	100	4.8	AZ 941-1CT-6D	AZ 941-1CT-6DE
12	21.2	400	9.6	AZ 941-1CT-12D	AZ 941-1CT-12DE
24	42.5	1,600	19.2	AZ 941-1CT-24D	AZ 941-1CT-24DE
48	85.0	6,400	38.4	AZ 941-1CT-48D	AZ 941-1CT-48DE

Heavy Duty (12 Amp Contact)

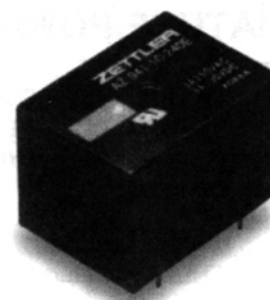
Mechanical Dimensions



Notes

- 1 Electrical life with cover vented
- 2 Other coil resistances and sensitivities available upon request
- 3 Relay may pull in with less than "Must Operate" value
- 4 Unsealed relays should not be dip-cleaned or spray washed
- 5 Specifications subject to change without notice

Dimensions in inches with metric equivalents in parenthesis. Tolerance is 0.010"



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RELAYS