AZ941_

MINIATURE PC BOARD RELAY

FEATURES

- Contacts rated at 3, 5, 10 or 16 Amps
- DC coils to 48 V
- Extremely low cost
- Life expectancy to 10 million operations
- Epoxy sealed for automatic wave soldering
- UL file E44211; CSA file 73566; VDE 10056 5
- Class B and F available

CONTACTS

Arrangement	SPDT (1 Form C) Form A available upon request		
Ratings	Resistive load		
Light Duty	Max. switched power: 90 W or 750 VA Max. switched current: 3 A Max. switched voltage: 150* VDC or 300 VAC UL Rating: 3 A at 30 VDC or 250 VAC		
Medium Duty	Max. switched power: 150 W or 1250 VA Max. switched current: 5 A Max. switched voltage: 150* VDC or 300 VAC UL Rating: 5 A at 30 VDC or 125 VAC 1/10 HP @ 125 VAC		
Heavy Duty	Max. switched power: 300 W or 2500 VA Max. switched current: 12 A Max. switched voltage: 150* VDC or 300 VAC UL Rating: 5 A at 30 VDC 12 A at 125 VAC 1/4 HP @ 125 VAC		
Extra Heavy Duty	Max. switched power: 300 W or 4000 VA Max. switched current: 16 A Max. switched voltage: 150* VDC or 300 VAC UL Rating: 16 A at 125 VAC 10 A at 30 VDC *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)	230 mW		
Max Continuous Dissipation	1.1 W 20°C (68°F) ambient .86 W 40°C (104°F) ambient		
Temperature Rise	27°C (49°F) nominal coil voltage		
Temperature	Max. 105°C (221°F) Max. 130°C (266°F) Class B Max. 155°C (311°F) Class F		



GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1x10 ⁷ 1 x 10 ⁵ at rated load			
Operate Time (typical)	6 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.)	1500 Vrms contact to coil 750 Vrms contact to contact Meets FCC part 68.302 1500 V lightning surge Meets FCC part 68.304 1000 V dielectric			
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH			
Dropout	Greater than 10% of nominal coil voltage			
Ambient Temperature Operating (Standard) Operating (Class B) Storage (Standard) Storage (Class B)	At nominal coil voltage -25°C (-13°F) to 70°C (158°F) -25°C (-13°F) to 95°C (203°F) -25°C (-13°F) to 105°C (221°F) -25°C (-13°F) to 130°C (266°F)			
Vibration	0.062" DA at 10–55Hz			
Shock	10 g			
Enclosure	P.B.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	13 grams			

NOTES

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Unsealed relays should not be dip cleaned.
- 4. Specifications subject to change without notice.
- 5 Only AZ941-1CT unsealed version is VDE approved at 5A, 250 VAC.



AZ941

RELAY ORDERING DATA

STANDARD RELAY	S: Light Duty Type (3 Amp Contact)							
	COIL SPEC	ORDER NUMBER							
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ±10%	Must Operate VDC	Unsealed	Sealed				
5	8.9	70	4.0	AZ941-1C-5D	AZ941-1C-5DE				
6	10.6	100	4.8	AZ941-1C-6D	AZ941–1C–6DE				
12	21.2	400	9.6	AZ941–1C–12D	AZ941–1C–12DE				
24	42.5	1,600	19.2	AZ941-1C-24D	AZ941–1C–24DE				
48	85.0	6,400	38.4	AZ941-1C-48D	AZ941–1C–48DE				
STANDARD RELAY	STANDARD RELAYS: Medium Duty Type (5 Amp Contact)								
	COIL SPEC	ORDER NUMBER							
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ±10%	Must Operate VDC	Unsealed	Sealed				
5	8.9	70	4.0	AZ941–1CH–5D	AZ941–1CH–5DE				
6	10.6	100	4.8	AZ941–1CH–6D	AZ941–1CH–6DE				
12	21.2	400	9.6	AZ941–1CH–12D	AZ941–1CH–12DE				
24	42.5	1,600	19.2	AZ941–1CH–24D	AZ941–1CH–24DE				
48	85.0	6,400	38.4	AZ941–1CH–48D	AZ941–1CH–48DE				
STANDARD RELAY	S: Heavy Duty Type	(12 Amp Contact)							
	COIL SPEC	IFICATIONS		ORDER NUMBER					
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ±10%	Must Operate VDC	Unsealed	Sealed				
5	8.9	70	4.0	AZ941-1CT-5D	AZ941–1CT–5DE				
6	10.6	100	4.8	AZ941-1CT-6D	AZ941–1CT–6DE				
12	21.2	400	9.6	AZ941–1CT–12D	AZ941–1CT–12DE				
24	42.5	1,600	19.2	AZ941-1CT-24D	AZ941–1CT–24DE				
48	85.0	6,400	38.4	AZ941–1CT–48D	AZ941–1CT–48DE				
STANDARD RELAY	STANDARD RELAYS: Extra Heavy Duty Type (16 Amp Contact)								
COIL SPECIFICATIONS			ORDER NUMBER*						
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ±10%	Must Operate VDC	Unsealed	Sealed				
5	8.9	70	4.0	AZ941–1CW–5DB	AZ941–1CW–5DEB				
6	10.6	100	4.8	AZ941–1CW–6DB	AZ941–1CW–6DEB				
12	21.2	400	9.6	AZ941-1CW-12DB	AZ941–1CW–12DEB				
24	42.5	1,600	19.2	AZ941-1CW-24DB	AZ941–1CW–24DEB				
48	85.0	6,400	38.4	AZ941-1CW-48DB	AZ941–1CW–48DEB				

* Add suffix "F" in place of "B" to indicate class F.

MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: ±0.010"

