AZ942H_

12 AMP MINIATURE PC BOARD RELAY

FEATURES

- Extremely low cost
- High switching capacity 12 Amps
- DC coils to 48 VDC
- Class B insulation for high temperature operation
- Class F insulation available
- Meets IEEE 587 6 kV lightning surge
- UL, CUR file E43203
- VDE approved models available, please contact the factory

CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)				
Ratings	Resistive load				
Form A	Max. switched power: 196 W or 2770 VA Max. switched current: 12 A Max. switched voltage: 150 VDC* or 300 VAC UL Rating : 10 A at 28 VDC, 100k cycles [1] [2] 10 A at 277 VAC, 100k cycles [1] 10 A at 277 VAC, 25k cycles [2]				
Form C	Max. switched power: 196 W or 1939 VA Max. switched current: 12 A Max. switched voltage: 150 VDC* or 300 VAC UL Rating: 7 A at 28 VDC, 100k cycles [1] [2]				
	12 A at 125 VAC, 100k cycles [1] 12 A at 125 VAC, 100k cycles N.O. [2] 12 A at 125 VAC, 50k cycles N.C. [2] 7 A at 277 VAC, 100k cycles [1] [2] 4 FLA / 4 LRA at 240VAC 100k cycles, N.O. [2] 2 FLA / 4 LAR at 240 VAC 100k cycles, N.C. [2] [1] Silver cadmium oxide [2] Silver tin oxide *NOTE: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.				
Material	Silver cadmium oxide or silver tin oxide				
Resistance	<100 milliohms initially (24 V. 1 A voltage drop method)				

COIL

Power At Pickup Voltage	230 mW
(typical)	
Max Continuous Dissipation	Class B: 1.7 W at 20°C (68°F) ambient Class F: 2.2 W at 20°C (68°F) ambient
Temperature Rise	25°C (45°F) at nominal coil voltage
Temperature	Class B: Max. 130°C (266°F) Class F: Max. 155°C (311°F)



GENERAL DATA

Life Expectancy	Minimum operations		
Mechanical	1x10 ⁷		
Electrical	1 x 10 ⁵ at 10A 277 VAC Res.		
Operate Time (typical)	10 ms at nominal coil voltage		
Release Time (typical)	5 ms at nominal coil voltage		
	(with no coil suppression)		
Dielectric Strength	3000 Vrms contact to coil		
(at sea level for 1 min.)	1000 Vrms across contacts		
Insulation Resistance	100 megohms min. at 20°C, 500 VDC,		
	50% RH		
Dropout	Greater than 10% of nominal coil voltage		
Ambient Temperature	At nominal coil voltage		
Operating	Class B: -40°C(-40°F) to 100°C(212°F)		
	Class F: -40°C(-40°F) to 120°C(248°F)		
Storage	Class B: -55°C(-67°F) to 130°C(266°F)		
	Class F: -55°C(-67°F) to 155°C(311°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 g		

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.



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RELAY ORDERING DATA

STANDARD RELA	YS				
	COIL SPECIFICATIONS			ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max Continuous VDC	Coil Resistance ±10%	Form A (SPST-N.O.)	Form C (SPDT)
3	2.4	6.5	25	AZ942H-1A-3D	AZ942H-1C-3D
5	4.0	11.0	70	AZ942H-1A-5D	AZ942H-1C-5D
6	4.8	13.0	100	AZ942H-1A-6D	AZ942H-1C-6D
9	7.2	20.0	225	AZ942H-1A-9D	AZ942H-1C-9D
12	9.6	26.0	400	AZ942H-1A-12D	AZ942H-1C-12D
24	19.2	52.0	1,600	AZ942H-1A-24D	AZ942H-1C-24D
48	38.4	104.0	6,200	AZ942H-1A-48D	AZ942H-1C-48D

*For epoxy sealed versions, add suffix "E". For silver tin oxide contacts add suffix "T". To indicate Class F version, add suffix "F".

IEEE STANDARD 587-1980 (ANSI/IEEE C62.41-1980) SURGE VOLTAGE WITHSTAND RATING

Test	Rating	Description
1.2 x 50 usec positive pulse	6 kV	Contact to coil – 5 pulses
1.2 X 50 usec negative pulse	6 kV	Contact to coil – 5 pulses
0.5 us 100 kHz ring wave	6 kV	Contact to coil - 5 waves

MECHANICAL DATA



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

