AZ943W

10 AMP MINIATURE PCB RELAY

FEATURES

- 10 Amp switching capability
- Wide contact gap of ≥ 0.8 mm
- Available in SPST-N.O. and SPDT versions
- Compact size, low seated height
- Flux tight and sealed versions available
- UL Class F insulation system (155°C) standard
- RoHS compliant
- UL / CUR - intended

Illustration similar

CONTACTS

Arrangement	SPST-N.O. (1 Form A), SPDT (1 Form C)
Ratings (max.)	(resistive load)
switched power	300 W or 2770 VA
switched current	10 A
switched voltage	30 VDC* or 277 VAC
	* Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Loads	
UL/CUR	intended
Contact material	$AgSnO_2$ (silver tin oxide)
Contact gap	≥ 0.8 mm
Initial resistance	< 100 mΩ (1 A / 24 V - voltage drop method)

COIL

Nominal coil DC voltages	6, 12, 18, 24
Dropout voltage	≥ 10% of nominal coil voltage
Coil power	
nominal	540 mW
at pickup voltage	405 mW
max. cont. dissipation	1040 mW at 20°C (68°F)
Temperature Rise	85 K (153°F) at nominal coil voltage
Max. temperature	155°C (311°F) class F

GENERAL DATA

Life Expectancy	(minimum operations)
mechanical	1×10^6
electrical	
1 Form A	2×10^4 at 10 A, 277 VAC, 70°C, resistive load
1 Form C	N.O. 2×10^4 at 10 A, 277 VAC, 70°C, res. load N.C. 5×10^3 at 5 A, 277 VAC, 70°C, res. load
Operate Time	10 ms (max.) at nominal coil voltage
Release Time	5 ms (max.) at nominal coil voltage, without coil suppression
Dielectric Strength	(at sea level for 1 min.) 1500 V_{RMS} coil to contact 1600 V_{RMS} between open contacts
Insulation Resistance	100 MΩ (min.) at 20°C, 500 VDC, 50% RH
Temperature Range	(at nominal coil voltage)
operating	-40°C (-40°F) to 70°C (158°F)
Vibration resistance	0.062" (1.5 mm) DA at 10–55 Hz
Shock resistance	10 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P. C.
Soldering	
max. temperature	270 °C (518°F)
max. time	5 seconds
Cleaning	
max. solvent temp.	80°C (176°F)
max. immersion time	30 seconds
Dimensions	
length	19.0 mm (0.748”)
width	15.3 mm (0.600”)
height	16.0 mm (0.630”)
Weight	10 grams (approx.)
Packing unit in pcs	20 per plastic tube / 1000 per carton box
Compliance	UL 508, IEC 61810-1, RoHS, REACH

ZETTLER electronics GmbH - A ZETTLER GROUP Company

Junkersstr. 3, D-82178 Puchheim, Germany
phone: +49 89 800 97-0
fax: +49 89 800 97-200
office@ZETTLERelectronics.com
www.ZETTLERelectronics.com

AZ943W

COIL VOLTAGE SPECIFICATIONS

Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Resistance Ohm ± 10%
6	4.5	9.0	65
12	9.0	18.0	270
18	13.5	27.0	600
24	18.0	36.0	1070

ORDERING DATA

AZ943W-□□H-□□D□F

Sealing option
nil: non sealed
E: sealed version

Nominal coil voltage
see coil voltage specifications table

Contact arrangement
1A: 1 Form A (SPST-N.O.)
1C: 1 Form C (SPDT)

Example ordering data

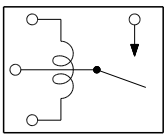
AZ943W-1AH-9DF 1 Form A, 9 VDC nominal coil voltage

AZ943W-1CH-12DEF 1 Form C, 12 VDC nominal coil voltage, sealed version

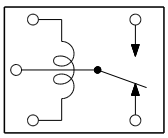
WIRING DIAGRAMS

Viewed towards terminals.

1 Form A

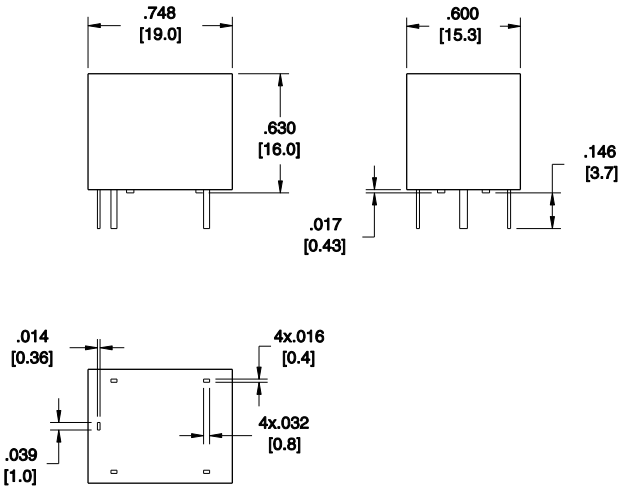


1 Form C



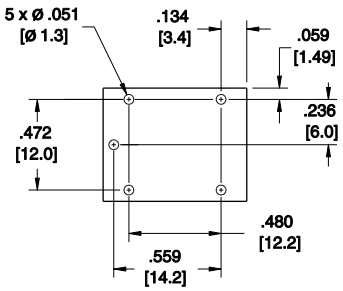
MECHANICAL DATA

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



PC BOARD LAYOUT

Dimensions in inches with metric equivalents in parentheses.
Viewed towards terminals.



NOTES

1. Specifications subject to change without notice.
2. All values at 20°C (68°F) unless otherwise stated.
3. Relay may pull in with less than "Must Operate" value.
4. Coil suppression circuits such as diodes, etc. in parallel to the coil will lengthen the release time.
5. Unsealed relays should not be dip cleaned.

DISCLAIMER

This product specification is to be used in conjunction with the application notes which can be downloaded from www.ZETTLERelectronics.com/pdfs/relais/ApplicationNotes.pdf

The specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.