

AZ21501

MINIATURE 50 A POWER RELAY

FEATURES

- 50 Amp switching capability
- 1 Form A, B and C contacts available
- Small dimensions and footprint
- Low coil power consumption
- Class F (155°C) insulation system standard
- Available with an epoxy seal for automatic wave soldering and immersion cleaning
- UL, CUR file E44211



Illustration similar

CONTACTS

Arrangement	SPST-N.O. (1 Form A) SPST-N.C. (1 Form B) SPDT (1 Form C)
Ratings (max.)	(resistive load) switched power 1500 W or 12000 VA switched current 50 A (N.O. contacts), 35 A (N.C. contacts) switched voltage 30 VDC* or 300 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Loads	
UL	N.O. contacts 50 A at 250 VAC, 10k cycles, resistive, 40°C 40 A at 250 VAC, 50k cycles, resistive, 40°C N.C. contacts 35 A at 250 VAC, 10k cycles, resistive, 40°C 30 A at 250 VAC, 50k cycles, resistive, 40°C
Contact materials	AgSnO ₂ (silver-tin-oxide)
Initial resistance	≤ 30 mΩ

COIL

Nominal coil DC voltages	see coil voltage specifications table
Dropout	> 10% of nominal coil voltage
Coil power	(typ.)
nominal	1.5 W
at pickup voltage	< 850 mW
Max. continuous dissipation	2.5 W at 20°C (68°F) ambient
Temperature Rise	56 K (133°F) at nominal coil voltage
Max. temperature	155°C (311°F) - class F coil wire

GENERAL DATA

Life Expectancy	(minimum operations) Mechanical 1 x 10 ⁷ Electrical 5 x 10 ⁴ at 40 A 250 VAC resistive (N.O.)
Operate Time	15 ms (max.) at nominal coil voltage
Release Time	10 ms (max.) at nominal coil voltage, w/o coil suppression
Dielectric Strength	(at sea level for 1 min.) 4000 V _{RMS} coil to contact 1500 V _{RMS} between open contacts
Insulation Resistance	1000 MΩ (min.) at 20°C, 500 VDC, 50% RH
Temperature Range	(at nominal coil voltage) Operating -55°C (-67°F) to 85°C (185°F)
Vibration resistance	1.5 mm (0.062") DA at 10–55 Hz
Shock	20 g
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	32.5 mm (1.280")
width	27.6 mm (1.087")
height	20.5 mm (0.807")
Weight	30 grams
Compliance	IEC 61810-1, UL 508, RoHS, REACH
Packing unit in pcs	15 per plastic tube / 300 per carton box

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.

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

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

