

AZ699

SENSITIVE SUBMINIATURE RELAY

FEATURES

- Extremely small (5mm)
- 6 Amp switching capability
- High sensitivity, 83 mW pickup
- Dielectric strength 4000 Vrms contact to coil
- Coils up to 48 VDC
- Epoxy sealed
- Clearance greater than 6 mm
- Creepage greater than 8 mm
- UL, CUR file E43203
- VDE file 40020124



CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 150 W or 1500 VA Max. switched current: 6 A Max. switched voltage: 300 VDC* or 400 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL, CUR	6 A at 250 VAC resistive
VDE	6 A at 250 VAC resistive
Material	Silver tin oxide, gold plating available
Resistance	< 100 milliohms initially (AgSnO ₂) < 30 milliohms initially (AgSnO ₂ , gold plated)

COIL

Power	
At Pickup Voltage (typical)	83 mW
Max. Continuous Dissipation	0.9 W at 20°C (68°F) ambient
Temperature Rise	20°C (36°F) at nominal coil voltage
Temperature	Max. 105°C (221°F)

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Minimum permissible contact load:
AgSnO₂ contact: 100 mA at 12 VDC
AgSnO₂ contact with gold plating: 10 mA at 5 VDC
4. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 X 10 ⁷ operations 1 X 10 ⁵ at 5 A, 250 VAC
Operate Time (typical)	5 ms at nominal coil voltage
Release Time (typical)	3 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1000 Vrms between open contacts 4000 Vrms contact to coil 6000 V surge, contact to coil
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	Greater than 5% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (158°F) -40°C (-40°F) to 105°C (221°F)
Vibration	5 g at 10–500 Hz
Shock	10 g
Enclosure	P.B.T. polyester 94V-0
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	260°C (500°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	6 grams
Packing unit in pcs	20 per plastic tube / 1000 per carton box

ZETTLER electronics GmbH

Junkersstrasse 3, D-82178 Puchheim, Germany

Tel. +49 89 800 97 0
Fax +49 89 800 97 200

office@ZETTLERelectronics.com
www.ZETTLERelectronics.com

AZ699

RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	AgSnO ₂ Contact	AgSnO ₂ with Gold Plated Contact
5	3.5	11.2	147	AZ699-1C-5DE	AZ699-1C-5DEA
12	8.4	26.8	848	AZ699-1C-12DE	AZ699-1C-12DEA
24	16.8	53.7	3,390	AZ699-1C-24DE	AZ699-1C-24DEA
48	33.6	100.0	10,600 ($\pm 15\%$)	AZ699-1C-48DE	AZ699-1C-48DEA

*Substitute "1A" for "1C" to indicate 1 Form A contacts. Add suffix "H" at the end of order number for horizontal mounting.

MECHANICAL DATA

Vertical Mount

PC BOARD LAYOUT

Vertical Mount Horizontal Mount

Note: Mounting hole diameters and center to center dimensions are the same for both vertical and horizontal mounting version

Horizontal Mount

WIRING DIAGRAM

Form A

Vertical Mount

Form A

Horizontal Mount

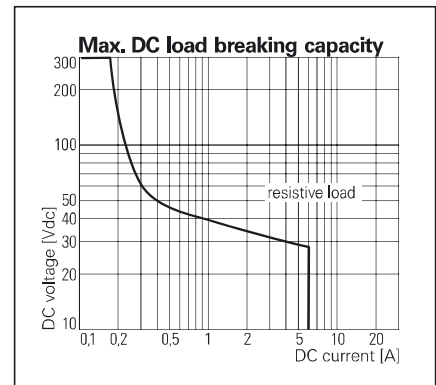
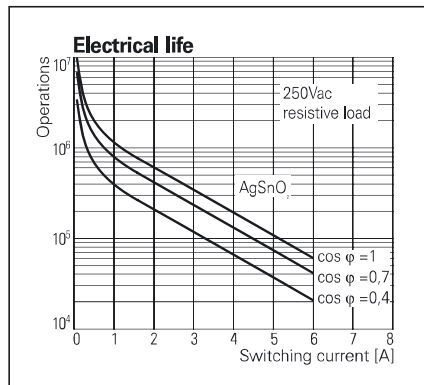
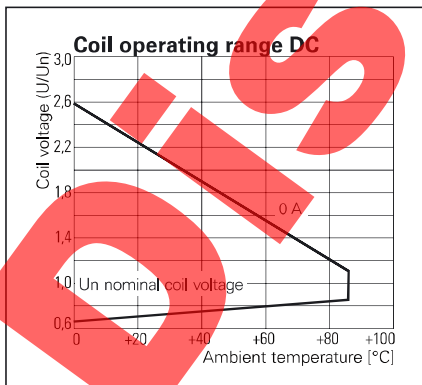
Form C

Vertical Mount

Form C

Horizontal Mount

Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010$ "



ZETTLER electronics GmbH

Junkersstrasse 3, D-82178 Puchheim, Germany

Tel. +49 89 800 97 0
Fax +49 89 800 97 200

office@ZETTLERelectronics.com
www.ZETTLERelectronics.com