AZSR250

50A

MINIATURE POWER RELAY

FEATURES

- 50 Amp switching
- Wide contact gap > 1.85mm
- Holding power <100mW
- Dielectric strength 5000Vrms
- Isolation spacing greater than 10mm
- Reinforced insulation, EN 60730-1 (VDE 0631, part 1), EN 60335-1 (VDE 0700, part 1)
- UL, CUR file E44211
- VDE certificate 40033251

RoHS

CONTACTS

Arrangement	SPST (1 Form A) DPST (2 Form A)
Ratings	Resistive load: AZSR250 Max. switched power: 1500W or 13850VA Max. switched current: 55A Max. switched voltage: 150 VDC* or 440 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load **UL**	AZSR250 50A at 277 VAC, resistive, 85°C
VDE	AZSR250 50A at 263 VAC, test refering to AC-7a, 85°C
Material	Silver tin oxide
Resistance	< 50 milliohms initially

COIL

Power **At Pickup Voltage (typical)**	270 mW
Max. Continuous Dissipation	2.0 W at 20°C (68°F) ambient
Temperature Rise	15°C (27°F) at nominal coil voltage
Temperature	Max. 155°C (311°F) Class F

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^6 3 x 10^4 at 50A 250 VAC Res.
Operate Time (typical)	40 ms at nominal coil voltage
Release Time (typical)	5 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000 Vrms coil to contact 2500 Vrms between contact sets 2500 Vrms between open contacts
Insulation Resistance	1000 megohms min. at 20°C 500 VDC 50% RH
Insulation (according to DIN VDE 0110, IEC 60664-1)	C250 Overvoltage category: III Pollution degree: 3 Nominal voltage: 250 VAC
Dropout	Greater than 5% of nominal coil voltage
Ambient Temperature **Operating**	At nominal coil voltage -40°C (-40°F) to 85°C (185°F)
Vibration	0.062" (1.5 mm) DA at 10–55 Hz
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
Weight	105 grams
Packing unit in pcs	10 per inner carton / 100 per carton box

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than “Must Operate” value.
3. Specifications subject to change without notice.

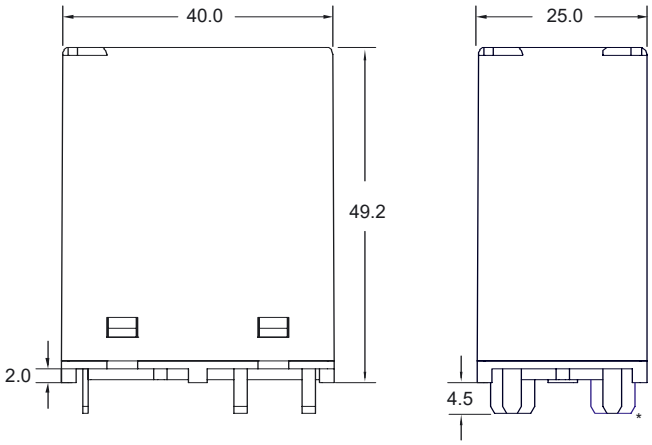
AZSR250

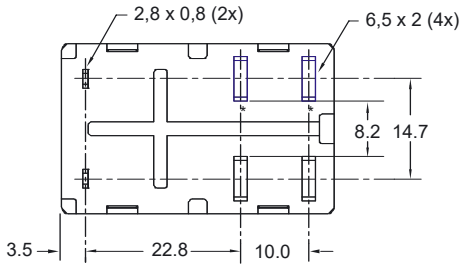
RELAY ORDERING DATA

COIL SPECIFICATIONS - SPST (1 FORM A)					
Nominal Coil VDC	Must Operate VDC	Min. Holding VDC	Max. Continuous VDC	Coil Resistance Ohm ± 10%	ORDER NUMBER
5	3.75	1.7	10.0	50	AZSR250-1AE-5D
9	6.75	3.1	18.0	170	AZSR250-1AE-9D
12	9.00	4.0	24.0	300	AZSR250-1AE-12D
18	13.50	6.5	36.0	675	AZSR250-1AE-18D
24	18.00	8.0	48.0	1200	AZSR250-1AE-24D

COIL SPECIFICATIONS - DPST (2 FORM A)					
Nominal Coil VDC	Must Operate VDC	Min. Holding VDC	Max. Continuous VDC	Coil Resistance Ohm ± 10%	ORDER NUMBER
5	3.75	2.1	10.0	50	AZSR250-2AE-5D
9	6.75	3.8	18.0	170	AZSR250-2AE-9D
12	9.00	5.0	24.0	300	AZSR250-2AE-12D
18	13.50	7.5	36.0	675	AZSR250-2AE-18D
24	18.00	10.0	48.0	1200	AZSR250-2AE-24D

MECHANICAL DATA

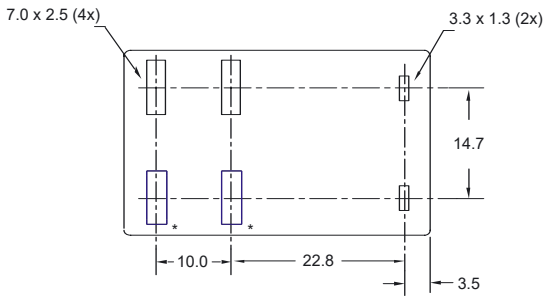




*not used on 1 Form A version

Viewed toward terminals

PC BOARD LAYOUT



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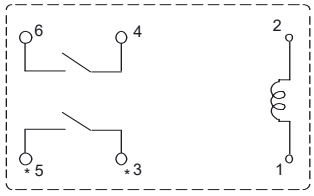
Viewed toward terminals

WIRING DIAGRAM



*not used on 1 Form A version

Viewed toward terminals

Dimensions in mm. Tolerance: ± .25 mm