AZ697

10 AMP MINIATURE POWER RELAY

FEATURES

- Dielectric strength 5000 Vrms
- Low cost
- Epoxy sealed version available
- 10 Amp switching — single pole contacts
- UL TV-5
- Isolation spacing greater than 8mm
- UL Class B insulation system, Class F available
- UL, CUR file E44211; TÜV file R50129288

CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 300W or 2770VA Max. switched current: 10A Max. switched voltage: 150VDC* or 277VAC *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load	
UL, CUR	TV-5 at 120VAC [1][2][3] 10A at 277VAC, General Use [1] 10A at 30VDC, Resistive [1] 1/3 HP at 250VAC [1] 1/4 HP at 125VAC (N.O.) [1] 10A at 277VAC, General Use, 100k cycles [2][3] 10A at 30VDC, Resistive, 100k cycles [2][3] 1/3HP at 250VAC, 100k cycles [2][3] 1/4HP at 125VAC, 100k cycles [2][3]
TÜV	10A at 250VAC, 30VDC Res. 100k cycles [1][2] 10A at 250VAC, 30VDC Res. 50k cycles [3]
Material	Silver cadmium oxide [1], silver nickel [2], silver tin oxide [3], Gold plating available
Resistance	< 50 milliohms initially (24V, 1A voltage drop method)

COIL

Power	
At Pickup Voltage (typical)	257mW
Max. Continuous Dissipation	1.9W at 20°C (68°F) ambient (Class B) 2.5W at 20°C (68°F) ambient (Class F)
Temperature Rise	34°C (61°F) at nominal voltage
Temperature	Max. 130°C (266°F) Class B Max. 155°C (311° F) Class F

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^7 1 x 10^5 at 10A, 240 VAC Res.
Operate Time (typical)	8ms at nominal coil voltage
Release Time (typical)	5ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000Vrms coil to contact 1000Vrms between open contacts
Insulation Resistance	1000 megohms min. at 20°C, 500VDC 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature **Operating** **Storage**	At nominal coil voltage -40°C (-40°F) to 90°C (194°F) Class B -40°C (-40°F) to 110°C (230°F) Class F -40°C (-40°F) to 130°C (266°F) Class B -40°C (-40°F) to 155°C (311°F) Class F
Vibration	0.062" 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
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight (Approx.)	18 grams

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.

AMERICAN ZETTLER, INC. *www.azettler.com*

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AZ697

RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohms ±10%	Form A (SPST)	Form C (SPDT)
3	2.25	5.7	17	AZ697–1A–3D	AZ697–1C–3D
5	3.75	9.4	47	AZ697–1A–5D	AZ697–1C–5D
6	4.50	11.4	68	AZ697–1A–6D	AZ697–1C–6D
9	6.75	17.4	160	AZ697–1A–9D	AZ697–1C–9D
12	9.00	22.8	275	AZ697–1A–12D	AZ697–1C–12D
18	13.50	27.9	620	AZ697–1A–18D	AZ697–1C–18D
24	18.00	45.7	1100	AZ697–1A–24D	AZ697–1C–24D
48	36.00	89.0	4170	AZ697–1A–48D	AZ697–1C–48D
60	45.00	115.3	7000	AZ697–1A–60D	AZ697–1C–60D

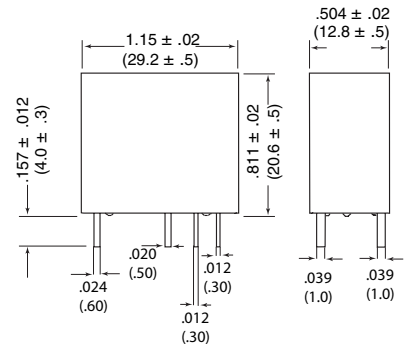
*For silver nickel contacts change "-1A" or "-1C" to "-1AB" or "-1CB". For silver tin oxide contacts change "-1A" or "-1C" to "-1AE" or "-1CE". For epoxy seal change "D" to "DE". For gold plating change "D" or "DE" to "DA" or "DEA". For Class F insulation add suffix "F" to part number. When suffix "E" is specified for Epoxy Seal, refer to AZ "Relay Technical Notes" on AZ website - Product Resources. Consult factory for other PCB process conditions that may apply.

HARDWARE ORDERING DATA

DESCRIPTION	ORDER NUMBER	DESCRIPTION	ORDER NUMBER
Socket	ST482–U1	Retainer	ST482–2

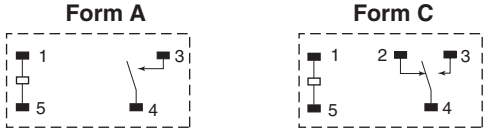
MECHANICAL DATA

Form A and C



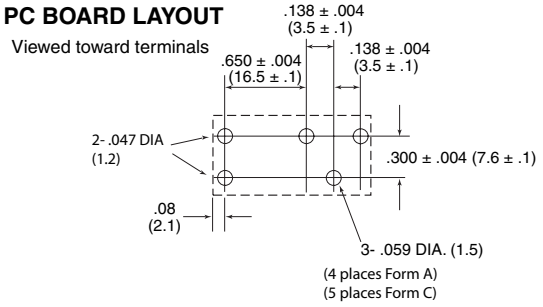
Terminal No.	Dimension Tol: ±0.005 (0.13)
1,2,3,5	0.018 (0.457) x 0.038 (0.965)
4	0.011 (0.279) x 0.038 (0.965)

WIRING DIAGRAM



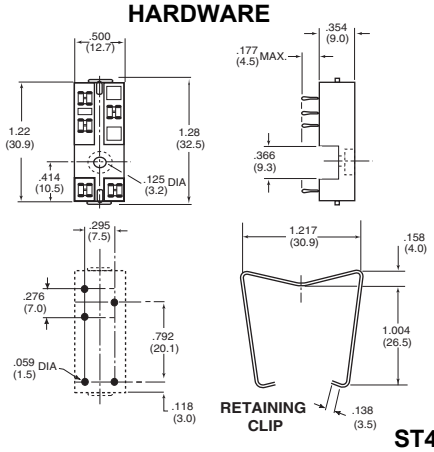
Viewed toward terminals

PC BOARD LAYOUT



HARDWARE

ST482-U1



ST482-2

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010" unless specified.

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