AZ6975

10 AMP MINIATURE POWER RELAY

FEATURES

- Dielectric strength 5000 Vrms
- Low cost
- Epoxy sealed version available
- 10 Amp switching — single pole contacts
- Isolation spacing greater than 8mm
- Class F insulation system available
- UL, CUR file E44211
- TUV R50290835



CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 300 W or 2500 VA Max. switched current: 10 A Max. switched voltage: 30* VDC or 250 VAC *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory
Rated Load	
UL, CUR	**Normally Open Contacts (N.O.)** 10 A at 250 VAC, Resistive,100k cycles 85°C 10 A at 30 VDC, Resistive 100k cycles 85°C 1/6 HP at 250 VAC, 100k cycles 85°C **Normally Closed Contacts (N.C.)** 5 A at 250 VAC, Resistive, 100k cycles 85°C 5 A at 30 VDC, Resistive, 100k cycles 85°C
TUV	5A NO / 3A NC @ 250VAC / 30VDC, 100k cycles, 85°C 10A NO / 5A NC @ 250VAC / 30VDC, 100k cycles, 85°C 16A NO / 8A NC @ 250VAC / 30VDC, 100k cycles, 85°C
Material	Silver tin oxide
Resistance	100 milliohms max (6 V, 1 A voltage drop method)

COIL

Power	
At Pickup Voltage (typical)	353 mW (Standard) 300mW (Sensitive)
Max. Continuous Dissipation	1.2 W at 20°C (68°F) ambient 0.9 W at 20°C (68°F) ambient
Temperature Rise	40° C (104°F) at nominal voltage
Temperature	Max. 105°C (221°F) Max. 155°C (311°F) Class F

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^7 1 x 10^5 at 10 A 250 VAC Res.
Operate Time (max)	15 ms at nominal coil voltage (standard) 20 ms at nominal coil voltage (sensitive)
Release Time (max)	8 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000 VAC contact to coil 1000 VAC between open contacts 10,000 V surge contact to coil
Insulation Resistance	1000 megohms min. at 500 VDC
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature **Operating** **Storage**	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (266°F)
Vibration	0.059" DA at 10–55 Hz
Shock **Mechanical** **Operational**	 100G 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	13 grams

NOTES

1. All values at 23°C (73.4°F).
2. Relay may pull in with less than “Must Operate” value.
3. Specifications subject to change without notice.

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AZ6975

RELAY ORDERING DATA

COIL SPECIFICATIONS (STANDARD)				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)	Form C (SPDT)
3	2.1	3.9	13 ±10%	AZ6975–1A–3D	AZ6975–1C–3D
5	3.5	6.5	36 ±10%	AZ6975–1A–5D	AZ6975–1C–5D
6	4.2	7.8	48.5 ±10%	AZ6975–1A–6D	AZ6975–1C–6D
9	6.3	11.7	115 ±10%	AZ6975–1A–9D	AZ6975–1C–9D
12	8.4	15.6	200 ±10%	AZ6975–1A–12D	AZ6975–1C–12D
18	12.6	23.4	450 ±10%	AZ6975–1A–18D	AZ6975–1C–18D
24	16.8	31.2	820 ±10%	AZ6975–1A–24D	AZ6975–1C–24D
48	33.6	62.4	3300 ±10%	AZ6975–1A–48D	AZ6975–1C–48D

RELAY ORDERING DATA

COIL SPECIFICATIONS (SENSITIVE)				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)	Form C (SPDT)
3	2.25	3.9	17 ±10%	AZ6975–1A–3DS	AZ6975–1C–3DS
5	3.75	6.5	48.5 ±10%	AZ6975–1A–5DS	AZ6975–1C–5DS
6	4.50	7.8	68 ±10%	AZ6975–1A–6DS	AZ6975–1C–6DS
9	6.75	11.7	155 ±10%	AZ6975–1A–9DS	AZ6975–1C–9DS
12	9.00	15.6	270 ±10%	AZ6975–1A–12DS	AZ6975–1C–12DS
18	13.50	23.4	600 ±10%	AZ6975–1A–18DS	AZ6975–1C–18DS
24	18.00	31.2	1100 ±10%	AZ6975–1A–24DS	AZ6975–1C–24DS
48	36.00	62.4	4400 ±10%	AZ6975–1A–48DS	AZ6975–1C–48DS

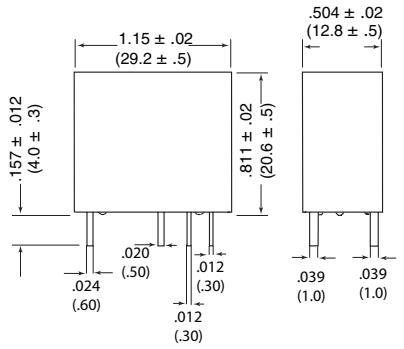
*For epoxy seal change “D” to “DE”. For class F insulation system add suffix “F” to part number.

HARDWARE ORDERING DATA

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

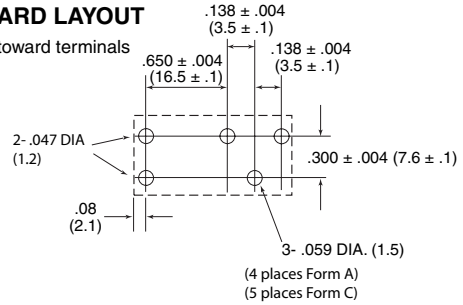
MECHANICAL DATA

Form A and C



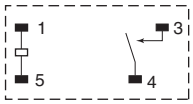
PC BOARD LAYOUT

Viewed toward terminals

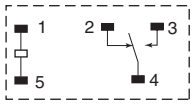


WIRING DIAGRAM

Form A



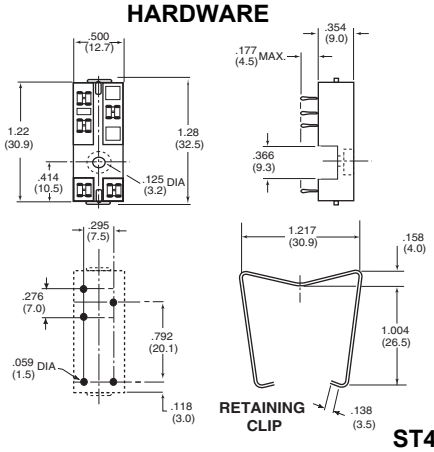
Form C



Viewed toward terminals

HARDWARE

ST482-U1



ST482-2

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