AZ743

10 AMP DPDT MINIATURE POWER RELAY

FEATURES

- Dielectric strength 5000 Vrms
- Low cost
- Epoxy sealed version available
- 10 Amp switching — double pole contacts
- AC and DC coils
- Class B (130°C) standard
- Class F (155°C) versions available
- Isolation spacing greater than 10 mm
- UL, CUR file E44211, VDE file 40006031

CONTACTS

Arrangement	DPST (2 Form A, 2 Form B) DPDT(2 Form C)
Ratings	Resistive load: Max. switched power: 240 W or 2500 VA Max. switched current: 10 A Max. switched voltage: 150* 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	10 A at 250 VAC Resistive, 30k cycles (N.O.)/ 6k (N.C.) [1] 8 A at 277 VAC Resistive, 30k cycles [1] 8 A at 277 VAC Resistive. 75k cycles [2] 8 A at 277 VAC Resisive, 100k cycles [3] 1/2 HP at 250 VAC (N.O.) [1] 1/4 HP at 125 VAC (N.O) [1]
VDE	8 A at 250 VAC Resistive, 30k cycles [1] Contact factory for additional VDE ratings [1] Silver cadmium oxide, [2] Silver tin oxide [3] Silver nickel
Material	Silver cadmium oxide, silver tin oxide, or silver nickel. Gold plating available
Resistance	< 50 milliohms initially (using 6 V 1 A method)

COIL

Power	
At Pickup Voltage (typical)	196 mW (DC) 0.43 VA (AC)
Max. Continuous Dissipation	1.7 W at 20°C (68°F) ambient
Temperature Rise	26°C (47°F) at nominal coil voltage
Max. Temperature	130°C (266°F)

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^7 1 x 10^5 at 8 A 240 VAC Res.
Operate Time (typical)	7 ms at nominal coil voltage
Release Time (typical)	4 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000 Vrms coil to contact 3000 Vrms between contact sets 1000 Vrms between open contacts
Insulation Resistance	1000 megohms min. at 500 VDC, 20°C, 50% RH
Dropout	Greater than 10% of nominal coil voltage (DC) Greater than 15% of nominal coil voltage (AC)
Ambient Temperature **Operating** **Storage**	At nominal coil voltage -40°C (-40°F) to 100°C (212°F) -40°C (-40°F) to 130°C (266°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	16 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.

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RELAY ORDERING DATA

COIL SPECIFICATIONS - DC COIL				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 10%	Unsealed	Sealed
5	3.5	10.2	62	AZ743–2C–5D	AZ743–2C–5DE
6	4.2	12.3	90	AZ743–2C–6D	AZ743–2C–6DE
12	8.4	24.7	360	AZ743–2C–12D	AZ743–2C–12DE
15	10.5	30.9	562	AZ743–2C–15D	AZ743–2C–15DE
18	12.6	37.0	810	AZ743–2C–18D	AZ743–2C–18DE
24	16.8	49.4	1,440	AZ743–2C–24D	AZ743–2C–24DE
48	33.6	98.0	5,760	AZ743–2C–48D	AZ743–2C–48DE
60	42.0	112.9	7,500	AZ743–2C–60D	AZ743–2C–60DE
110	77.0	206.9	25,200	AZ743–2C–110D	AZ743–2C–110DE

COIL SPECIFICATIONS - AC COIL					ORDER NUMBER*	
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Coil Current (mA)	Coil Resistance	Unsealed	Sealed
24	18.0	31.2	31.6	350 ± 10%	AZ743–2C–24AF	AZ743–2C–24AEF
115	86.3	149.5	6.6	8,100 ± 15%	AZ743–2C–115AF	AZ743–2C–115AEF
230	172.5	299.0	3.2	32,500 ± 15%	AZ743–2C–230AF	AZ743–2C–230AEF

* Substitute “2A” or “2B” in place of “2C” for Form A or B respectively. Add suffix “E” to “2A” or “2B” or “2C” for silver tin oxide contacts. Add suffix “B” to “2A” or “2B” or “2C” for silver nickel contacts. Add suffix “A” for gold plated contacts. Add suffix “F” for Class F version (DC coils only). 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.

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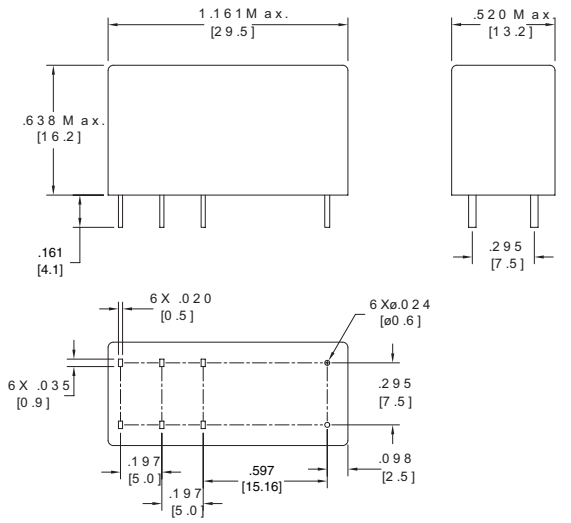
HARDWARE ORDERING DATA

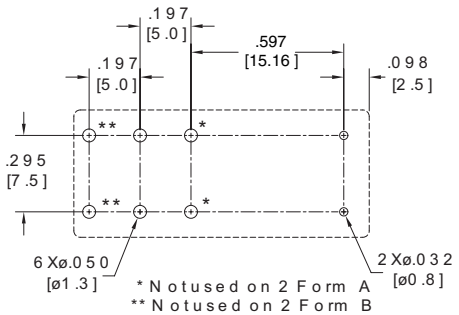
DESCRIPTION	ORDER NUMBER	DESCRIPTION	ORDER NUMBER
Socket	ST484–U1	Retainer	ST482–3

MECHANICAL DATA

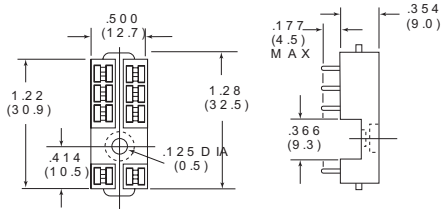
OUTLINE DIMENSIONS



PC BOARD LAYOUT

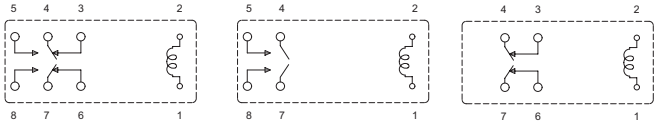


VIEW TOWARD TERMINALS

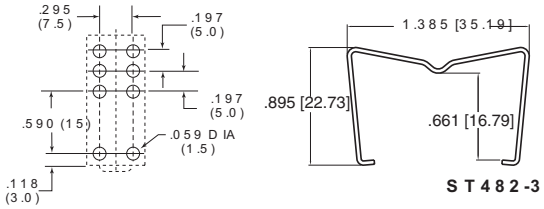


WIRING DIAGRAM

VIEWED TOWARDS TERMINAL



RETAINING CLIP



VIEW TOWARD TERMINALS

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

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