AZ733

DPDT MINIATURE POWER RELAY

FEATURES

- Dielectric strength 5000 Vrms
- Low cost
- Epoxy sealed version available
- 12 Amp switching — double pole contacts
- Isolation spacing greater than 8mm
- UL Class B insulation system, Class F available
- UL, CUR file E44211
- TÜV file R50129285

CONTACTS

Arrangement	DPST (2 Form A) DPDT (2 Form C)
Ratings	Resistive load: Max. switched power: 300 W or 2500 VA Max. switched current: 12 A Max. switched voltage: 150* VDC or 380 VAC *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load **TÜV**	12 A at 277 VAC Resisitive [2][3] 10 A at 250 VAC General Use, 100k cycles[1][2][3] 10 A at 30 VDC N.O. Resistive 100k cycles [1] 10 A at 30 VDC N.C. Resistive 50k cycles [1] 10 A at 30 VDC N.O./N.C. Resistive 25k cycles[2][3] 1/4 HP at 240 VAC [1] 1/8 HP at 120 VAC [1] TV-3 at 125 VAC (2 Form A) [1] 5 A at 30 VDC, 250 VAC resistive, 100k cycles [1][2][3] [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 (24 V, 1 A voltage drop method)

COIL

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

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1×10^7 1×10^5 at 10 A 240 VAC Res.
Operate Time (typical)	8 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 contact to coil 1000 Vrms between open contacts 3000 Vrms between contact sets
Surge Voltage Between Contact to Coil	10kV (1.2 x 50 µs)
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature **Operating** **Storage**	 -40°C (-40°F) to 90°C (194°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	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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AZ733

RELAY ORDERING DATA

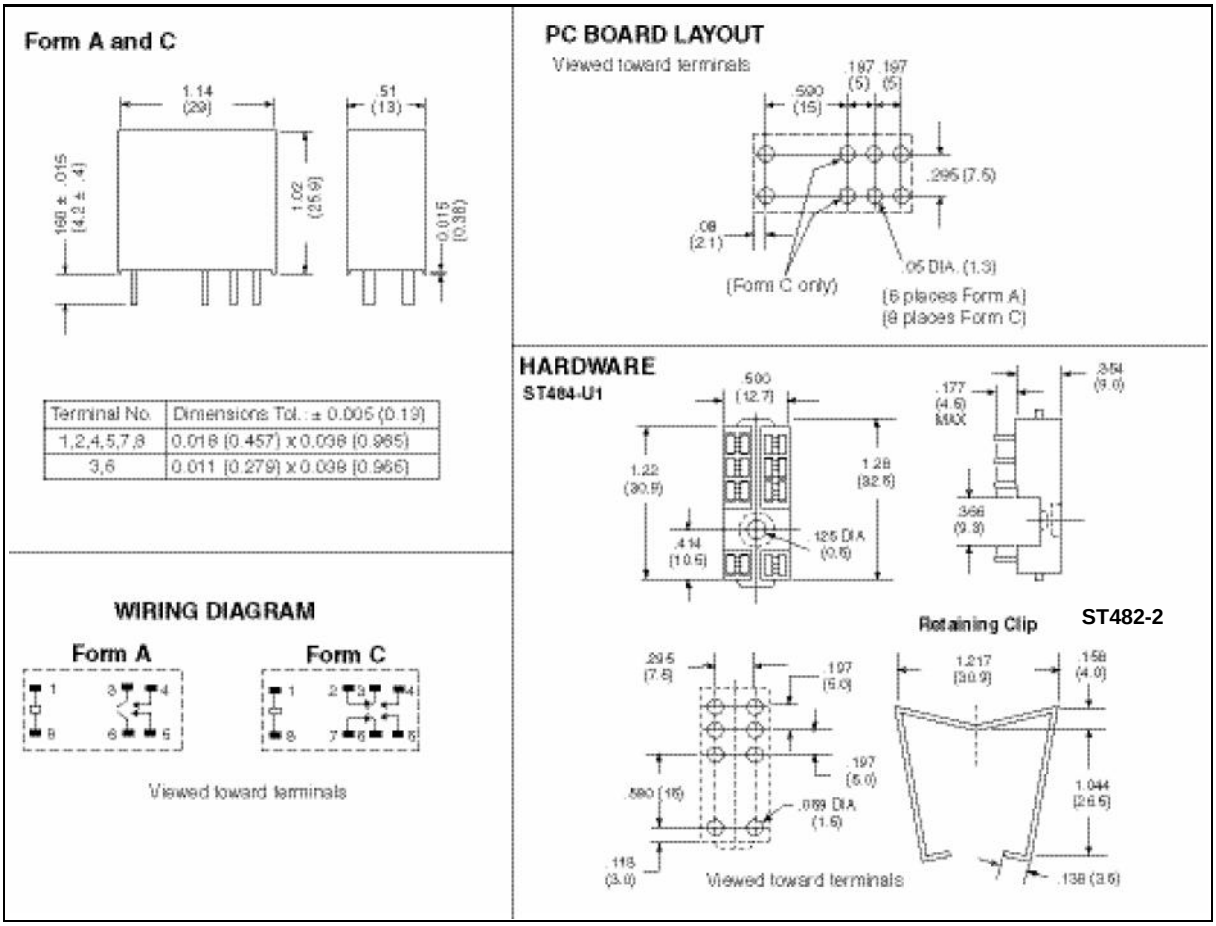
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (DPST)	Form C (DPDT)
3	2.1	5.7	17 ±10%	AZ733–2A–3D	AZ733–2C–3D
5	3.5	9.4	47 ±10%	AZ733–2A–5D	AZ733–2C–5D
6	4.2	11.4	68 ±10%	AZ733–2A–6D	AZ733–2C–6D
9	6.3	17.4	160 ±10%	AZ733–2A–9D	AZ733–2C–9D
12	8.4	22.8	275 ±10%	AZ733–2A–12D	AZ733–2C–12D
18	12.6	27.9	650 ±10%	AZ733–2A–18D	AZ733–2C–18D
24	16.8	45.7	1100 ±15%	AZ733–2A–24D	AZ733–2C–24D
48	33.6	89.0	4170 ±15%	AZ733–2A–48D	AZ733–2C–48D
60	42.0	115.3	7000 ±15%	AZ733–2A–60D	AZ733–2C–60D
110	79.3	170.5	22900 ±15%	AZ733–2A–110D	AZ733–2C–110D

*Add suffix “E” to “2A” or “2C” for silver tin oxide contacts. Add suffix “B” to “2A” or “2C” for silver nickel contacts. Add suffix”E” for epoxy sealed version. Add suffix “F” for Class F insulation system. Add suffix “A” for gold plated contacts. 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	ST484–U1	Retainer	ST482–2

MECHANICAL DATA



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

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