# **AZ733**

## **DPDT MINIATURE POWER RELAY**

#### **FEATURES**

- Dielectric strength 5000 Vrms
- Low cost
- Epoxy sealed version available
- 10 Amp switching double pole contacts
- Isolation spacing greater than 8mm
- UL Class B insulation system
- UL, CUR file E44211
- TÜV file R9659062



#### **CONTACTS**

Arrangement	DPST (2 Form A) DPDT (2 Form C)
Ratings	Resistive load:  Max. switched power: 300 W or 2500 VA  Max. switched current: 10 A
	Max. switched current. 10 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	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]
ΤÜV	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)

#### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> 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		
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.



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#### **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	

<sup>\*</sup>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 "A" for gold plated contacts.\*\*110 v Coil not TÜV approved.

#### HARDWARE ORDERING DATA

DESCRIPTION	ORDER NUMBER	DESCRIPTION	ORDER NUMBER
Socket	ST484-U1	Retainer	ST482-2

#### **MECHANICAL DATA** PC BOARD LAYOUT Form A and C Viewed toward terminals 1.14 (29) .51 (13) .4) .295 (7.5) 1.02 (25.9) 160 ± . (4.2 ± .05 DIA. (1.3) (Form C only) (6 places Form A) (8 places Form C) **HARDWARE** .500 (9.0)ST484-U1 (12.7)(4.5) MAX Terminal No. Dimensions Tol.: ± 0.005 (0.13) 0.018 (0.457) x 0.038 (0.965) 1,2,4,5,7,8 0.011 (0.279) x 0.038 (0.965) 1.28 3,6 1.22 (32.5)(30.9)366 (9.3) .125 DIA .414 (0.5)(10.5) **WIRING DIAGRAM Retaining Clip** ST482-2 .158 .295 (4.0)(7.5)(30.9)(5.0).197 (5.0)1.044 Viewed toward terminals .590 (15) (26.5)059 DIA (1.5).118 (3.0) .138 (3.5) Viewed toward terminals

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

