

AZ733W

12A DPST MINIATURE POWER RELAY

FEATURES

- Dielectric strength 5000Vrms
- 1.5mm contact gap (2.0mm contact gap available)
- 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)
Ratings	Resistive load: Max. switched power: 240W or 2500VA Max. switched current: 12A Max. switched voltage: 250VDC* or 250VAC *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL, CUR	10A at 250VAC, 100k cycles [1] 12A at 277VAC, resistive, 70°C, 80K cycles [2] 1/3HP at 125VAC [2] 3/4HP at 250VAC [2]
TÜV	TV-3 at 125VAC, 25k cycles [1] 12A at 250VAC, resistive, 70°C, 10k cycles [2][3] 10A at 250VAC, resistive, 70°C, 30k cycles [1][2][3] 10A at 30VAC, resistive, 70°C, 10k cycles [1]
Material	Silver cadmium oxide [1], Silver tin oxide [2], Silver nickel [3], Gold plating available
Resistance	< 50 milliohms initially (24V, 1A voltage drop method)

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 5 x 10 ⁵ 1 x 10 ⁵ at 10A ,250VAC Res.
Operate Time (Typical)	10ms at nominal coil voltage
Release Time (Typical)	4ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000Vrms contact to coil 2500Vrms between open contacts 3000Vrms between contact sets
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 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
Vibration	0.062" (1.5mm) 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

COIL

Power At Pickup Voltage (typical)	450mW
Max. Continuous Dissipation	2.0W at 20°C (68°F) ambient
Temperature Rise	40°C (83°F) at nominal coil voltage
Temperature	Max. 130°C (266°F) Class B Max. 155°C (311°F) Class F

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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AZ733W

RELAY ORDERING DATA

COIL SPECIFICATIONS					ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohms $\pm 10\%$		Unsealed	Sealed
			1.5mm gap	2.0mm gap		
3	2.25	4.7	11.3	-	AZ733W-2A-3D	AZ733W-2A-3DE
5	3.8	7.9	31	18	AZ733W-2A-5D	AZ733W-2A-5DE
6	4.5	9.5	45	26	AZ733W-2A-6D	AZ733W-2A-6DE
9	6.8	14.2	101	58	AZ733W-2A-9D	AZ733W-2A-9DE
12	9.0	18.9	180	102	AZ733W-2A-12D	AZ733W-2A-12DE
18	13.5	28.4	405	-	AZ733W-2A-18D	AZ733W-2A-18DE
24	18.0	37.9	720	410	AZ733W-2A-24D	AZ733W-2A-24DE
30	22.5	47.3	1125	-	AZ733W-2A-30D	AZ733W-2A-30DE
48	36.0	75.9	2,880	1,650	AZ733W-2A-48D	AZ733W-2A-48DE
60	45.0	94.8	4,500	-	AZ733W-2A-60D	AZ733W-2A-60DE
110	82.5	183.3	16,800	-	AZ733W-2A-110D	AZ733W-2A-110DE

* Add suffix "E" to "2A" for silver tin oxide contacts. Add suffix "B" to "2A" for silver nickel contacts. 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

Terminal No.	Dimensions Tol.: ± 0.005 (0.13)
1,4,5,8	0.018 (0.457) x 0.038 (0.965)
3,6	0.011 (0.279) x 0.038 (0.965)

WIRING DIAGRAM
(Bottom View)

PC BOARD LAYOUT
(Bottom View)

ST484-U1 HARDWARE

RETAINING CLIP

Viewed toward terminals

ST482-2

Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010$ "

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