

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 277VAC *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.

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RELAY ORDERING DATA

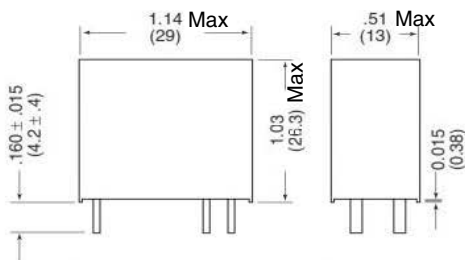
COIL SPECIFICATIONS					ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohms $\pm 10\%$ 1.5mm gap 2.0mm gap		Unsealed	Sealed
3	2.25	4.7	11.3	—	AZ733W-2A-3D	AZ733W-2A-3DE
5	3.8	7.9	31	18	AZ733W-2A-5D	AZ733W-2A-5DE
6	4.5	9.5	45	26	AZ733W-2A-6D	AZ733W-2A-6DE
9	6.8	14.2	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

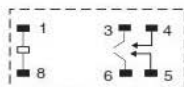
DESCRIPTION	ORDER NUMBER	DESCRIPTION	ORDER NUMBER
Socket	ST484-U1	Retainer	ST482-2

MECHANICAL DATA

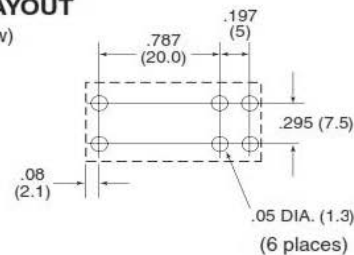


Terminal No.	Dimensions Tol.: ± 0.005 (0.13)
1,4,5,8	0.018 (0.457) x 0.038 (0.965)
3,6	0.011 (0.279) x 0.038 (0.965)

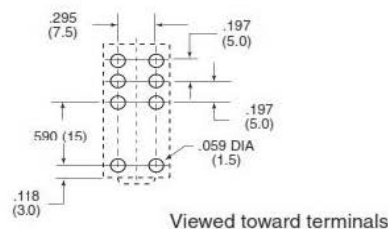
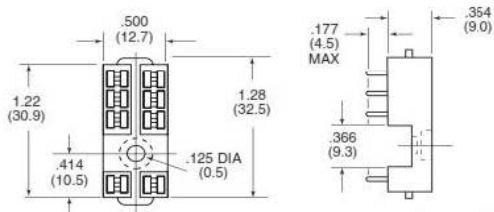
WIRING DIAGRAM (Bottom View)



PC BOARD LAYOUT (Bottom View)

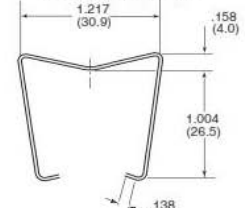


ST484-U1 HARDWARE



Viewed toward terminals

RETAINING CLIP



ST482-2

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

AMERICAN ZETTLER, INC.

5/15/19

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This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.