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, CUR file E44211
- TÜV certificate R50129285

CONTACTS

Arrangement	DPST (2 Form A) DPDT (2 Form C)
Ratings	Resistive load: Max. switched power: 300 W or 3324 VA Max. switched current: 12 A Max. switched voltage: 250 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**	10 A at 250 VAC, 85°C, 100k cycles [1] 8 A at 30 VDC, 85°C, 100k cycles [1] 1/4 HP at 240 VAC, 85°C [1] 1/8 HP at 120 VAC, 85°C [1] TV-3 at 125 VAC, 85°C, 25k cycles [1] 2 Form A 10 A at 30 VDC, 85°C, 100k cycles [1] 3/4 HP at 250 VAC [3] 2 Form C 10 A at 250 VAC, 85°C, 100k cycles [1][2][3] 10 A at 30 VDC, 85°C, 50k cycles [1] 10 A at 30 VDC, 85°C, 30k cycles [2] 1/3 HP at 125 VAC [2][3] 2 Form C - normally open contacts 12 A at 277 VAC resistive, 70°C, 80K cycles [2][3] 10 A at 30 VDC, 85°C, 25k cycles [3] 2 Form C - normally closed contacts 12 A at 277 VAC resistive, 70°C, 10K cycles [2][3] 10 A at 30 VDC, 85°C, 100k cycles [3]
TÜV	10 A at 250 VAC resistive, 70°C, 30k cycles [1][2] 10 A at 30 VDC, 70°C, 20k cycles [1][2] 2 Form A 12 A at 250 VAC resistive, 70°C, 10k cycles [2][3] 10 A at 250 VAC resistive, 70°C, 50k cycles [3]
Material	Silver cadmium oxide [1], silver nickel [2], silver tin oxide [3]
Resistance	< 50 milliohms initially

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^7 1 x 10^5 at 10 A 250 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 coil to contact 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 85°C (185°F) -40°C (-40°F) to 105°C (266°F)
Vibration	0.062" (1.5 mm) 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
Packing unit in pcs	50 per plastic tray / 500 per carton box

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)

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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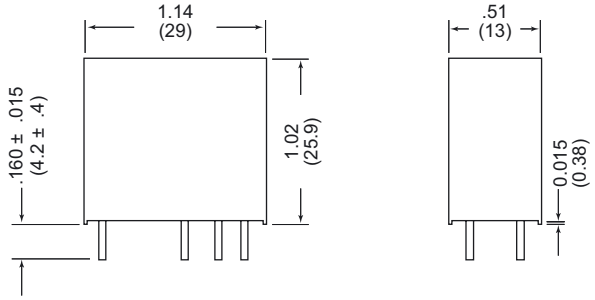
RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm	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	1,100 ± 15%	AZ733–2A–24D	AZ733–2C–24D
48	33.6	89.0	4,170 ± 15%	AZ733–2A–48D	AZ733–2C–48D
60	42.0	115.3	7,000 ± 15%	AZ733–2A–60D	AZ733–2C–60D
110	79.3	170.5	22,900 ± 15%	AZ733–2A–110D	AZ733–2C–110D

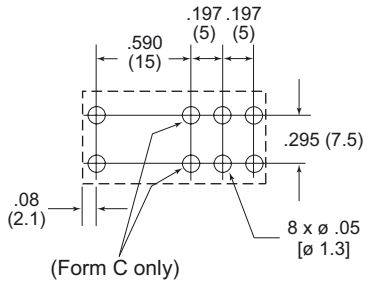
* Add suffix “B” to “2A” or “2C” for silver nickel contacts.
Add suffix “E” to “2A” or “2C” for silver tin oxide contacts.
Add suffix “E” for epoxy sealed version.

MECHANICAL DATA



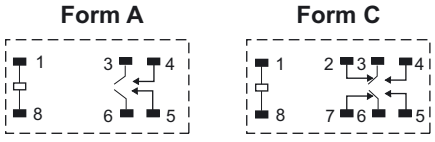
Terminal No.	Dimensions Tol.: ± 0.005 (0.13)
1,2,4,5,7,8	0.018 (0.457) x 0.038 (0.965)
3,6	0.011 (0.279) x 0.038 (0.965)

PC BOARD LAYOUT



Viewed toward terminals

WIRING DIAGRAM



Viewed toward terminals

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

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