

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 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] |
| TÜV | 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 ⁷ 1 x 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 |
| 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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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 "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

Form A and C

| 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

Form A

Form C

Viewed toward terminals

HARDWARE

ST484-U1

Retaining Clip ST482-2

Viewed toward terminals

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



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