# 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 Class B insulation system, Class F available
- UL, CUR file E44211
- TÜV file R50129285

### CONTACTS

| Arrangement | DPST (2 Form A)<br>DPDT (2 Form C)   |
|-------------|--|
| Ratings     | Resistive load:<br>Max. switched power: 300 W or 2500 VA<br>Max. switched current: 12 A<br>Max. switched voltage: 150* VDC or 380 VAC<br>*Note: If switching voltage is greater than 30 VDC, special<br>precautions must be taken. Please contact the factory.   |
| Rated Load  | 12 A at 277 VAC Resisitive [2][3]<br>10 A at 250 VAC General Use, 100k cycles[1][2][3]<br>10 A at 30 VDC N.O. Resistive 100k cycles [1]<br>10 A at 30 VDC N.C. Resistive 50k cycles [1]<br>10 A at 30 VDC N.O./N.C. Resistive 25k cycles[2][3]<br>1/4 HP at 240 VAC [1]<br>1/8 HP at 120 VAC [1]<br>TV-3 at 125 VAC (2 Form A) [1] |
| ΤÜV         | 12A at 250VAC, resistive, 70°C, 10k cycles [2][3]<br>10A at 250VAC, resistive, 70°C, 30k cycles [1][2][3]<br>10A at 30VAC, resistive, 70°C, 10k cycles [1]   |
| Material    | Silver cadmium oxide [1], Silver tin oxide [2],<br>Silver nickel [3], Gold plating available   |
| Resistance  | < 50 milliohms initially<br>(24 V, 1 A voltage drop method)  |

### COIL

| Power<br>At Pickup Voltage<br>(typical)<br>Max. Continuous<br>Dissipation | 257 mW<br>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) Class B<br>Max. 155°C (311°F) Class F |

| 2445482 | AZ733-2CE-6DE  |
|---------|----------------|
| 2445483 | AZ733-2CE-9DE  |
| 2445484 | AZ733-2CE-12DE |
| 2445485 | AZ733-2CE-18DE |
| 2445486 | AZ733-2CE-24DE |



### **GENERAL DATA**

| Life Expectancy<br>Mechanical<br>Electrical      | Minimum operations<br>1 x 10 <sup>7</sup><br>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<br>(with no coil suppression)                                     |  |  |
| Dielectric Strength<br>(at sea level for 1 min.) | 5000 Vrms contact to coil<br>1000 Vrms between open contacts<br>3000 Vrms between contact sets |  |  |
| Surge Voltage<br>Between Contact to<br>Coil      | 10kV (1.2 x 50 μs)   |  |  |
| Insulation<br>Resistance                         | 1000 megohms min. at 20°C, 500 VDC,<br>50% RH  |  |  |
| Dropout  | Greater than 10% of nominal coil voltage   |  |  |
| Ambient Temperature<br>Operating<br>Storage      | -40°C (-40°F) to 85°C (185°F)<br>-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.

## AMERICAN ZETTLER, INC.

## AZ733

### **RELAY ORDERING DATA**

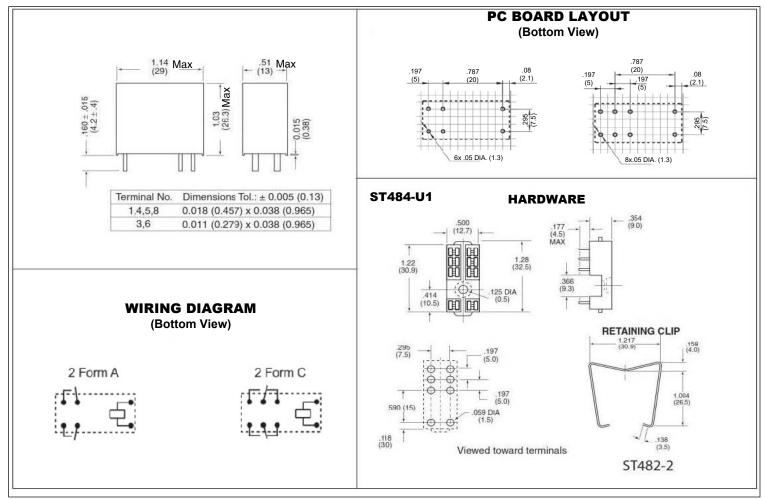
| COIL SPECIFICATIONS |                     |                        | ORDER NUMBER*      |                  |                  |
|---------------------|---------------------|------------------------|--------------------|------------------|------------------|
| Nominal Coil<br>VDC | Must Operate<br>VDC | Max. Continuous<br>VDC | Coil<br>Resistance | Form A<br>(DPST) | Form C<br>(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 "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**



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

### AMERICAN ZETTLER, INC.

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### E-MAIL: SALES @ AZETTLER.COM

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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.