## 8 A DPDT MINIATURE POWER RELAY

## FEATURES

- Dielectric strength 5000 Vrms
- Low height: 15.7 mm
- Epoxy sealed version available
- 8 Amp switching - double pole contacts
- AC and DC coils
- Isolation spacing greater than 10 mm
- Proof tracking index (PTI/CTI) 250
- Surpasses requirements of VDE 0631/0700
- UL, CUR file E43203; VDE 119918


## CONTACTS

| Arrangement | DPDT (2 Form C) <br> DPST (2 Form A) |
| :--- | :--- |
| Ratings | Resistive load: <br> Max. switched power: 240 W or 2000 VA <br> Max. switched current: 8 A <br> Max. switched voltage: 150* VDC or 400 VAC <br> *Note: If switching voltage is greater than 30 VDC, <br> special precautions must be taken. Please contact the <br> factory. |
| Rated Load <br> UL, CUR <br> VDE | 8 A at 250 VAC resistive <br> 8 A at 250 VAC |
| Material | Silver nickel or silver nickel gold plated |
| Resistance | $<100$ milliohms initially |

## COIL

| Power <br> At Pickup Voltage <br> (typical) | $200 \mathrm{~mW}(\mathrm{DC}$ coil) |
| :--- | :--- |
| Max. Continuous | $.794 \mathrm{VA}(\mathrm{AC}$ coil) |
| Missipation | 1.7 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient |
| Temperature Rise | $26^{\circ} \mathrm{C}\left(47^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Max. Temperature | $115^{\circ} \mathrm{C}\left(239^{\circ} \mathrm{F}\right)$ |

## NOTES

1. All values at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$.
2. Relay may pull in with less than "Must Operate" value.
3. Specifications subject to change without notice.

## GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations $\begin{aligned} & 3 \times 10^{7} \\ & 1 \times 10^{5} \text { at } 8 \text { A } 240 \text { VAC res. } \end{aligned}$ |
| :---: | :---: |
| Operate Time (typical) | 7 ms at nominal coil voltage |
| Release Time (typical) | 3 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min .) | 5000 Vrms coil to contact <br> 2500 Vrms between contact sets <br> 1000 Vrms between open contacts |
| Insulation Resistance | 1000 megohms min. at 500 VDC, $20^{\circ} \mathrm{C}, 50 \% \mathrm{RH}$ |
| Dropout | Greater than $10 \%$ of nominal coil voltage - DC Greater than $15 \%$ of nominal coil voltage - AC |
| Ambient Temperature Operating <br> Storage | At nominal coil voltage $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $90^{\circ} \mathrm{C}\left(194^{\circ} \mathrm{F}\right)$ - DC coils $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $75^{\circ} \mathrm{C}\left(167^{\circ} \mathrm{F}\right)$ - AC coils $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $115^{\circ} \mathrm{C}\left(239^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062" DA at $10-55 \mathrm{~Hz}$ |
| Shock | 20 g |
| Enclosure | P.B.T. polyester, UL-94 : V0 |
| Terminals | Tinned copper alloy, P.C. |
| Max. Solder Temp. | $270^{\circ} \mathrm{C}\left(518{ }^{\circ} \mathrm{F}\right)$ |
| Max. Solder Time | 5 seconds |
| Max. Solvent Temp. | $80^{\circ} \mathrm{C}\left(176^{\circ} \mathrm{F}\right)$ |
| Max. Immersion Time | 30 seconds |
| Weight | 14 grams |

## RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC COIL |  |  |  |  |  |  | ORDER NUMBER* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underset{\text { VDC }}{\substack{\text { Nominal Coil }}}$ | $\begin{gathered} \hline \text { Must Operate } \\ \text { VDC } \end{gathered}$ |  | $\begin{aligned} & \text { Max. Continuous } \\ & \text { VDC } \end{aligned}$ |  | $\begin{gathered} \hline \text { Coil Resistance } \\ \text { Ohm }, \pm 10 \% \\ \hline \end{gathered}$ |  | 2 Form A | 2 Form C |
| 3 | 2.1 |  | 7.6 |  |  | 22 | AZ742-2A-3D | AZ742-2C-3D |
| 5 | 3.5 |  | 12.7 |  |  | 60 | AZ742-2A-5D | AZ742-2C-5D |
| 6 | 4.2 |  | 15.3 |  |  | 90 | AZ742-2A-6D | AZ742-2C-6D |
| 9 | 6.3 |  | 22.9 |  |  | 200 | AZ742-2A-9D | AZ742-2C-9D |
| 12 | 8.4 |  | 30.6 |  |  | 360 | AZ742-2A-12D | AZ742-2C-12D |
| 18 | 12.6 |  | 45.9 |  |  | 710 | AZ742-2A-18D | AZ742-2C-18D |
| 24 | 16.8 |  | 61.2 |  |  | 1,440 | AZ742-2A-24D | AZ742-2C-24D |
| 36 | 25.2 |  | 92.0 |  |  | 3,140 | AZ742-2A-36D | AZ742-2C-36D |
| 48 | 33.6 |  | 122.0 |  |  | 5,700 | AZ742-2A-48D | AZ742-2C-48D |
| 60 | 42.0 |  | 153.0 |  |  | 7,500 | AZ742-2A-60D | AZ742-2C-60D |
| 110 | 77.0 |  | 280.0 |  |  | 25,200 | AZ742-2A-110D | AZ742-2C-110D |
| COIL SPECIFICATIONS - AC Coil |  |  |  |  |  |  | ORDER NUMBER | HARDWARE ORDERING DATA |
| $\begin{gathered} \text { Nominal Coil } \\ \text { VAC } \\ \hline \end{gathered}$ | Must Operate VAC | Max. Continuous VAC |  | Nominal Current $\mathrm{mA} \pm 10 \%$ |  | Coil Resistance $\pm 10 \%$ | 2 Form C |  |
| 12 | 9.0 | 18.0 |  | 63.0 |  | 100 | AZ742-2C-12A | DESCRIPTION |
| 24 |  | 36.0 |  | 31.3 |  | 400 | AZ742-2C-24A |  |
| 48 | 36.0 72.0 |  |  | 15.6 |  | 1550 | AZ742-2C-48A | Socket |
| 60 | 45.0 90.0 |  |  | 12.5 |  | 2600 | AZ742-2C-60A | ORDER NUMBER |
| 110 | 82.5 165.0 |  |  | 6.8 |  | 8900 | AZ742-2C-110A | ST484-U1 |
| 115 | 86.3 172.5 |  |  | 6.5 |  | 9600 | AZ742-2C-115A | DESCRIPTION |
| 120 | 90.0 180.0 |  |  | 6.3 |  | 10200 | AZ742-2C-120A | Retainer |
| 220 | 165.0 330.0 |  |  | 3.4 |  | 35500 | AZ742-2C-220A | ORDER NUMBER |
| 230 | 172.5 | 345.0 |  | 3.3 |  | 38500 | AZ742-2C-230A | ST482-3 |
| 240 | 180.0 360.0 |  |  | 3.1 |  | 42500 | AZ742-2C-240A |  |

* Add suffix "E" for sealed version. "For gold plated contacts substitute "-2AG" for "-2A" or "-2CG" for "-2C". 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.


## MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010^{\prime \prime}$

