20 AMP SUB-MINIATURE POWER RELAY FOR AUTOMOTIVE USE

FEATURES

- Low cost
- Up to 20 Amp switching capability in a compact size
- Sealed
- Two separate relays in DPDT version
- · Quiet operation
- · Vibration and shock resistant
- Designed for power windows, power seats and wiper applications
- QS-9000 Factory



CONTACTS

| Arrangement | DPDT (2 Form C) SPDT (1 Form C) | | | |
|-------------|--|--|--|--|
| Ratings | Max. switched power: 280 W | | | |
| | Max. switched voltage: 100 VDC Max. switched current (make/break), continuous: 1 Form C: 25A/20A, 20A 2 Form C: 25A/20A, 20A | | | |
| Material | Silver nickel, silver tin oxide available | | | |
| Resistance | < 100 milliohms at 1A, 5 VDC | | | |

COIL

| Power | |
|--------------------------------|-------------------------------|
| At Pickup Voltage (typical) | 203 mW |
| Max. Continuous Dissipation | 1.0 W 20°C (68°F) ambient |
| Temperature Rise | 42°C (108°F) nominal coil VDC |
| Max. Temperature | 155°C (311°F) |

NOTES

- 1. All values at 20°C (68°F).
- 2. Maximum make current refers to in-rush current of lamp load.
- 3. Relay may pull in with less than "Must Operate" value.
- 4. Specifications subject to change without notice.

GENERAL DATA

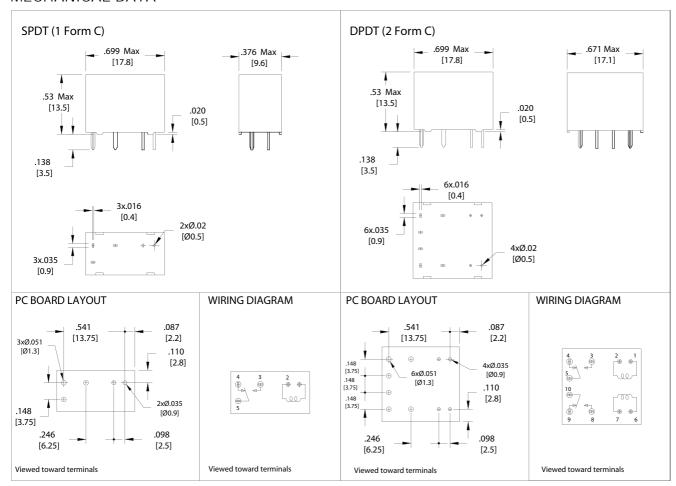
| Life Expectancy Mechanical Electrical | Minimum operations 1 x 10 ⁷ operations 2 x 10 ⁵ operations at 20 A 14 VDC Res. | | |
|---|--|--|--|
| Operate Time (typical) | 3 ms at nominal coil voltage | | |
| Release Time (typical) | 1.5 ms at nominal coil voltage (with no coil suppression) | | |
| Dielectric Strength (at sea level for 1 min.) | 500 Vrms coil to contact 500 Vrms between open contacts | | |
| Insulation Resistance | 100 megohms min. at 20°C, 500 VDC, 50% RH | | |
| Dropout | > 8.3% 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" (1.5 mm) DA at 10–55Hz, 10 g at 55-200 Hz | | |
| Shock | 30 g, 11 ms, functional | | |
| 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 | 10 grams | | |

RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC Coil | | | ORDER NUMBER* | | |
|-------------------------------|------------------|---------------------|----------------------|--------------------|--------------------|
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil Resistance ±10% | 1 Form C (SPST) | 2 Form C (SPDT) |
| 12 | 7.2 | 15.0 | 255 | AZ934-1C-12DE | AZ934-2C-12DE |

^{*}Add suffix "T" for Silver tin oxide contact material.

MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± 0.010"