

Voltage Range 20 to 100 V
Current 10.0 Ampere

Features

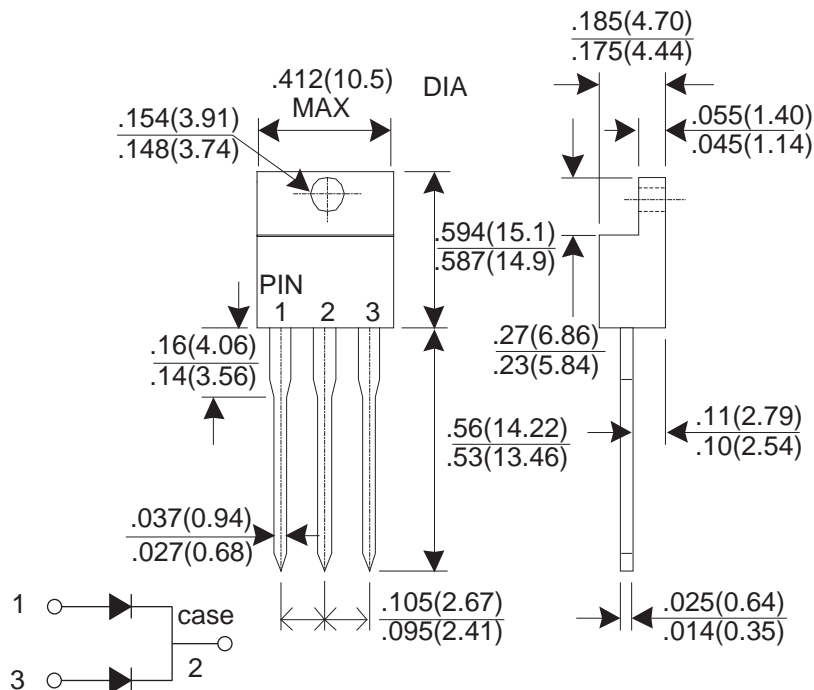
- ★ Low forward voltage drop
- ★ High current capability
- ★ High reliability
- ★ High surge current capability

Mechanical Data

- ★ Case: Molded plastic TO-220AB
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-202 method 208
- ★ Polarity: Color band denotes cathode end
- ★ Mounting position: Any
- ★ Weight: 2.07 grams

Dimensions in inches and (millimeters)

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

| PARAMTER | SYBMOL | TSR 10C20C | TSR 10C40C | TSR 10C60C | TSR 10C80C | TSR 10C100C | UNIT |
|---|----------|---------------------------|---------------|---------------|---------------|----------------|------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 20 | 40 | 60 | 80 | 100 | V |
| Maximum RMS Voltage | VRMS | 14 | 28 | 42 | 56 | 70 | V |
| Maximum DC Blocking Voltage | VDC | 20 | 40 | 60 | 80 | 100 | V |
| Maximum Average Forward Rectified Current TL=100°C | IF(AV) | 10.0 | | | | | A |
| Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 125 | | | | | A |
| Maximum Instantaneous Forward Voltage @ 5.0 A | VF | 0.55 | | 0.65 | 0.75 | 0.85 | V |
| Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=100°C | IR | 1.0 30 | | | | | mA |
| Typical junction Capacitance (Note 1) | CJ | 500 | | | | | pF |
| Operating Junction and Storage Temperature Range | TJ, TSTG | -55 to +125 / -55 to +150 | | | | | °C |

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

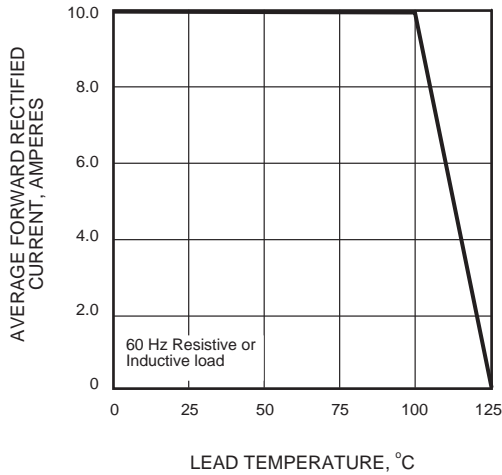


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

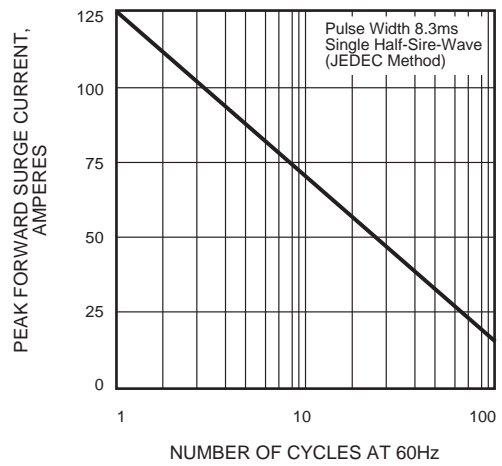


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

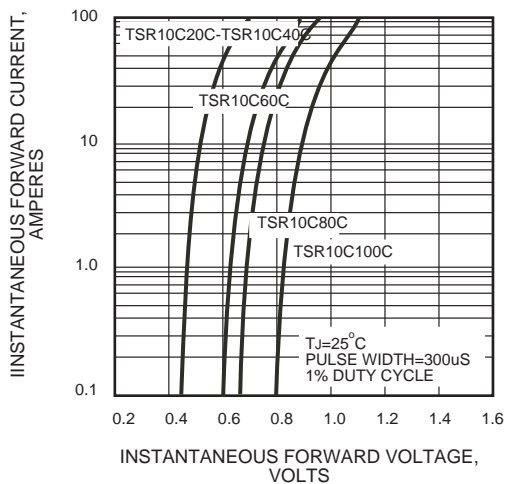


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

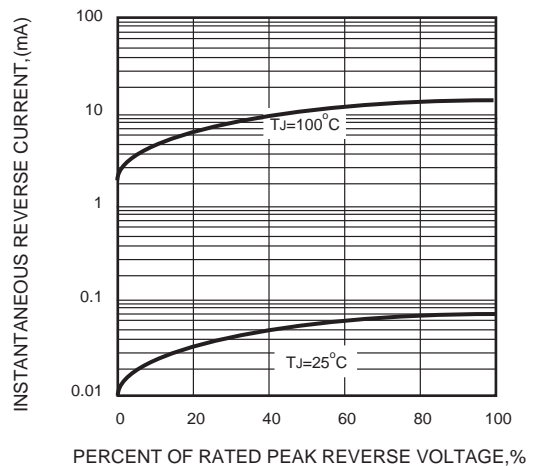


FIG.5 - TYPICAL JUNCTION CAPACITANCE

