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**SENSITRON SEMICONDUCTOR**

**TECHNICAL DATA**
**DATA SHEET 126, REV E**

**JAN**
**JANTX**
**JANTXV**

# HIGH CURRENT AXIAL LEAD RECTIFIERS

**DESCRIPTION: 200-1000 VOLT, 3.0 AMP, 2000 NANOSECOND RECTIFIER**

**-Suffix "US" denotes melf/surface mount packaging**

**MAX. RATINGS / ELECTRICAL CHARACTERISTICS** All ratings are at $T_A$ = 25°C unless otherwise specified.

| RATING | CONDITIONS | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|
| Peak Inverse Voltage (PIV)<br>**1N5550**<br>**1N5551**<br>**1N5552**<br>**1N5553**<br>**1N5554** | - | - | - | <br>200<br>400<br>600<br>800<br>1000 | Vdc |
| Average DC Output Current ($I_o$) | $T_A$ = +55 °C | - | - | 3.0 | Amps |
| Peak Single Cycle Surge Current ($I_{fsm}$) | $t_p$ = 8.3 ms Single Half Cycle Sine Wave, Superimposed On Rated Load | - | - | 150 | Amps(pk) |
| Operating and Storage Temp. ($T_{op}$ & $T_{stg}$) | - | -65 | - | +175 | °C |
| Maximum Forward Voltage ($V_f$)<br>**1N5550**<br>**1N5551**<br>**1N5552**<br>**1N5553**<br>**1N5554** | $I_f$ = 9.0A (300 μsec pulse, duty cycle < 2%) | - | - | <br>1.2<br>1.2<br>1.2<br>1.3<br>1.3 | Volts |
| Maximum Instantaneous Reverse Current At Rated (PIV) | $T_A$ = 25° C<br>$T_A$ = 100° C | - | - | 1.0<br>75 | μAmps |
| Reverse Recovery Time ($t_{rr}$) | $I_f$ = 0.5A, $I_r$ = 1.0A, $I_{rr}$ = 0.25A | - | - | 2000 | nsec |
| Thermal Resistance ($\theta_{JL}$) | Junction to Lead<br>d = 0.375" | | | 22 | °C/W |
| Thermal Resistance ($\theta_{JEC}$) | Junction to Endcap | - | - | 11 | ° C/W |

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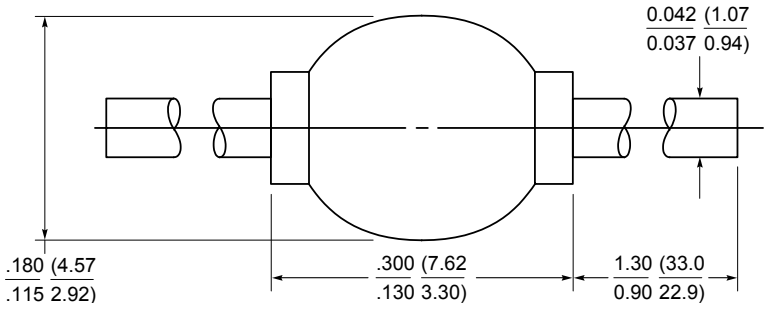
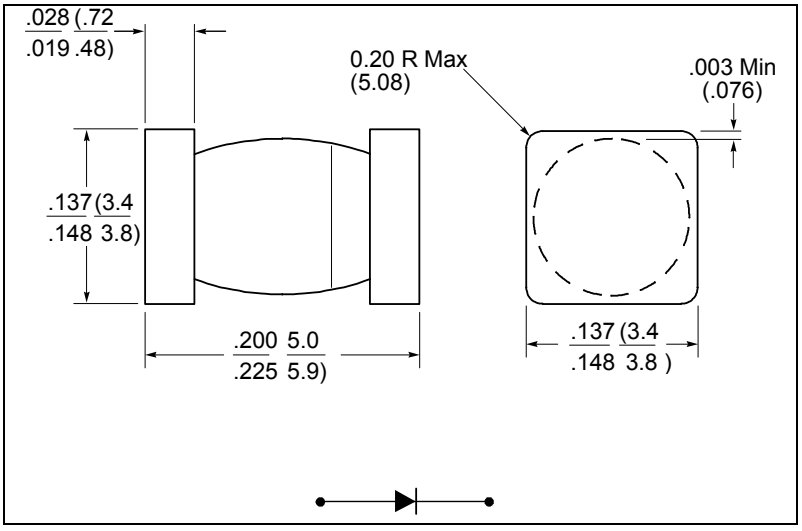
MECHANICAL DIMENSIONS In Inches / (mm), min./max.




**PKG. 301**

**Note:** The cathode side is marked with a dark colored band on one side of the diode body.




**MELF-B**

**Note:** The cathode side is marked on body with a dark band.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**1N5550/US**
**1N5551/US**
**1N5552/US**
**1N5553/US**
**1N5554/US**

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