

# **SENSITRON** **SEMICONDUCTOR**

1N5550/US  
1N5551/US  
1N5552/US  
1N5553/US  
1N5554/US

TECHNICAL DATA  
DATA SHEET 126, REV E

JAN JANTX JANTXV
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## 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  $T_A = 25^\circ\text{C}$  unless otherwise specified.

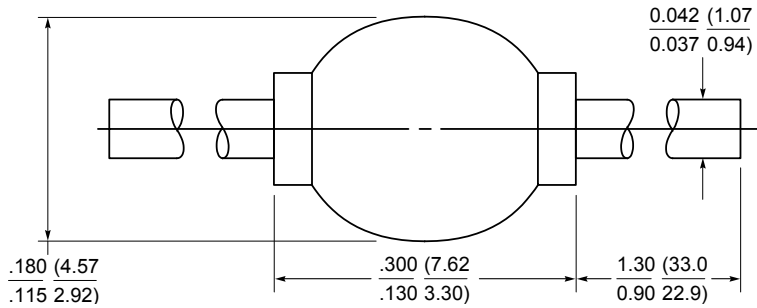
RATING	CONDITIONS	MIN	TYP	MAX	UNIT
Peak Inverse Voltage (PIV) 1N5550 1N5551 1N5552 1N5553 1N5554	-	-	-	200 400 600 800 1000	Vdc
Average DC Output Current ( $I_o$ )	$T_A = +55^\circ\text{C}$	-	-	3.0	Amps
Peak Single Cycle Surge Current ( $I_{fsm}$ )	$t_p = 8.3$ ms Single Half Cycle Sine Wave, Superimposed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

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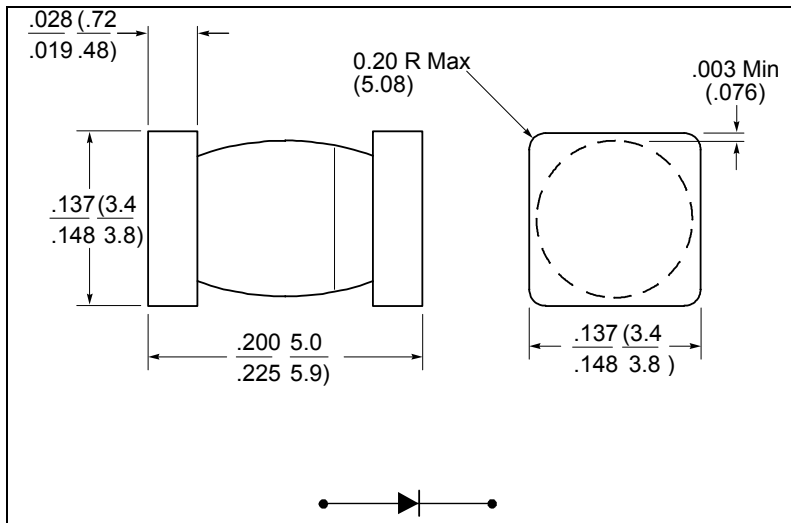
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MECHANICAL DIMENSIONS In Inches / (mm), min./max.



**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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