

SENSITRON **SEMICONDUCTOR**

TECHNICAL DATA
DATA SHEET 126, REV G.3

1N5550/US thru 1N5554/US

**3A STANDARD RECOVERY
RECTIFIERS**

AVAILABLE AS
1N, JAN, JANTX, JANTXV
JANS

3A Standard Recovery Rectifiers

Qualified per MIL-PRF-19500/420

DESCRIPTION:

This voidless hermetically sealed standard recovery rectifier diode series is military qualified per MIL-PRF-19500/420 and is targeted for space, commercial and military aircraft, military vehicles, shipboard markets, and all high reliability applications.

FEATURES / BENEFITS:

- ✓ Hermetic, non-cavity glass package
- ✓ Category I Metallurgically bonded
- ✓ All parts are 100% hot solder dipped
- ✓ JAN/ JANTX/ JANTXV available per MIL-PRF-19500/420

ELECTRICAL CHARACTERISTICS

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	-	-	100	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	If = 9.0A (300 μsec pulse, duty cycle < 2%) $t_p \leq 8.3$ ms	-	-	1.2 1.2 1.2 1.3 1.3	Volts

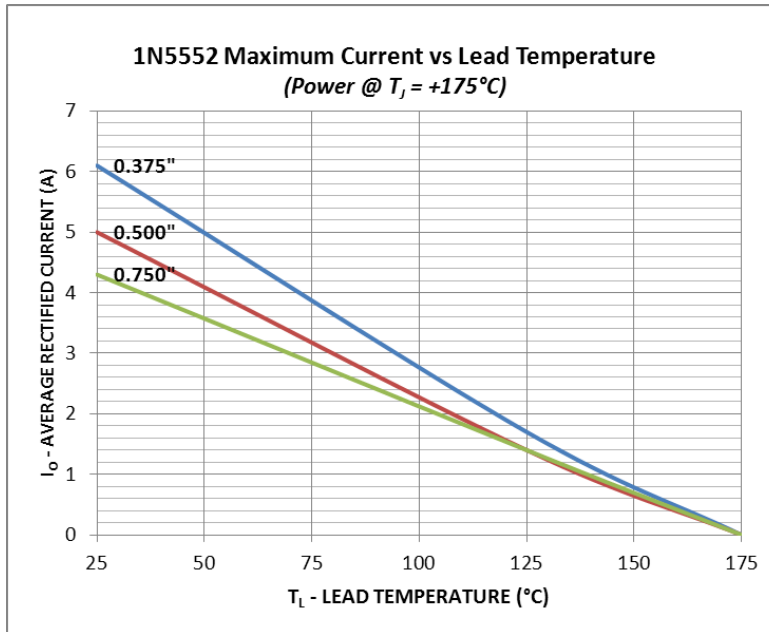
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RATING	CONDITIONS	MIN	TYP	MAX	UNIT
Maximum Instantaneous Reverse Current At Rated (PIV)	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	-	-	1.0 60	μAmps
Reverse Recovery Time (t_{rr})	$I_F = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$	-	-	2.0	μs
Thermal Resistance (θ_{JL})	Junction to Lead $d = 0.375''$			22	$^\circ\text{C/W}$
Thermal Resistance (θ_{JEC})	Junction to Endcap	-	-	6.5	$^\circ\text{C/W}$

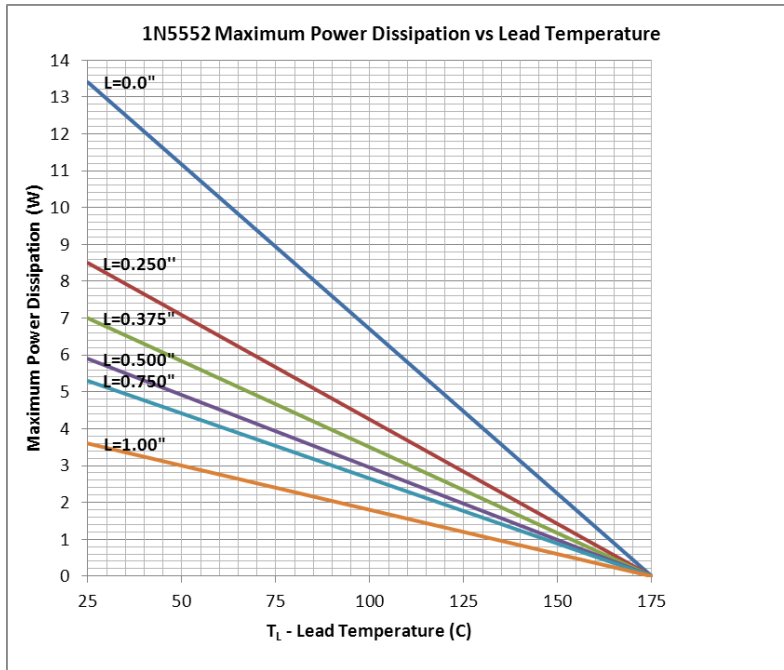
GRAPHS:



SENSITRON SEMICONDUCTOR

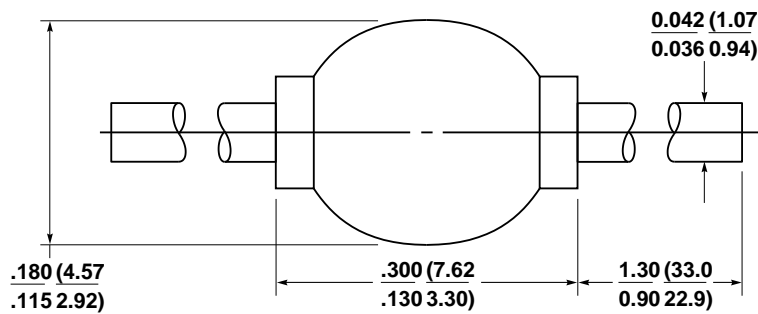
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PACKAGE DIMENSIONS (inches/mm)

AXIAL (PKG 301)

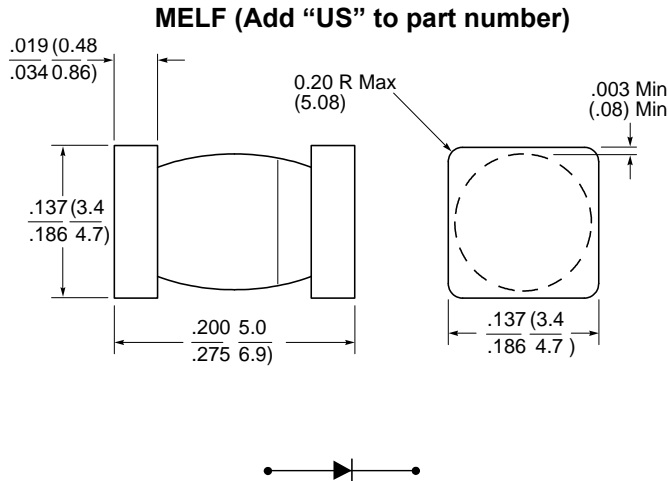


Note: The cathode side is marked with a dark colored band on one side of the diode body.

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Note: The cathode side is marked on body with a dark band.

MELF-B

PART ORDERING INFORMATION

The following part numbers can be screened and tested to the military screening flow. The parts are marked in accordance with the testing performed, example:

Sensitron Screening Level	*Part Number-- Leaded Package (example for 1N5550)	*Part Number-- Surface Mount Package (example for 1N5550US)
1N	1N5550	1N5550US
JAN	JAN1N5550	JAN1N5550US
JANTX	JANTX1N5550	JANTX1N5550US
JANTXV	JANTXV1N5550	JANTXV1N5550US
JANS	JANS1N5550	JANS1N5550US

*Parts can also be ordered Tape & Reel

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