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, commerical 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

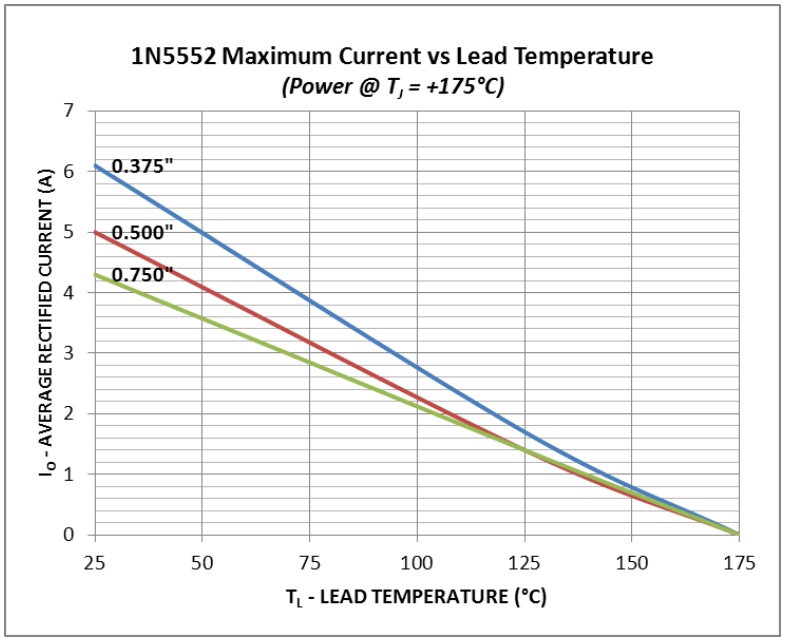
ELECTRICAL CHARACTERISTICS

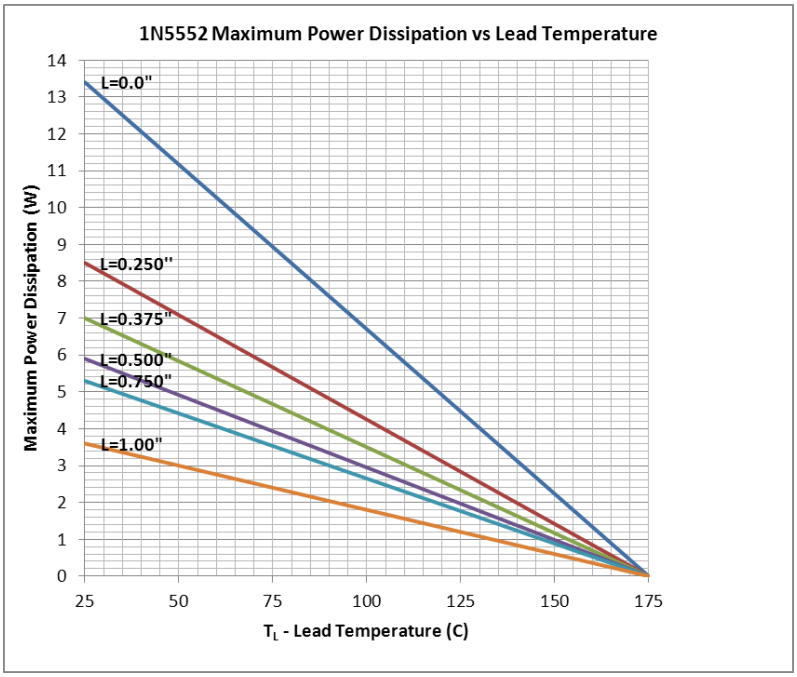
MAX. RATINGS / ELECTRICAL CHARACTERISTICS All ratings are at T_A = 25ºC unless otherwise specified.

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 ºC	-	-	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	°C
Maximum Forward Voltage (V_F) 1N5550 1N5551 1N5552 1N5553 1N5554	If = 9.0A (300 µsec pulse, duty cycle < 2%) tp ≤ 8.3 ms	-	-	 1.2 1.2 1.2 1.3 1.3	Volts

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

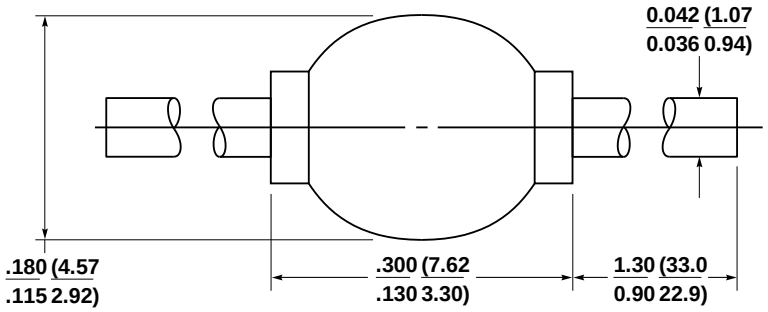
GRAPHS:





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.

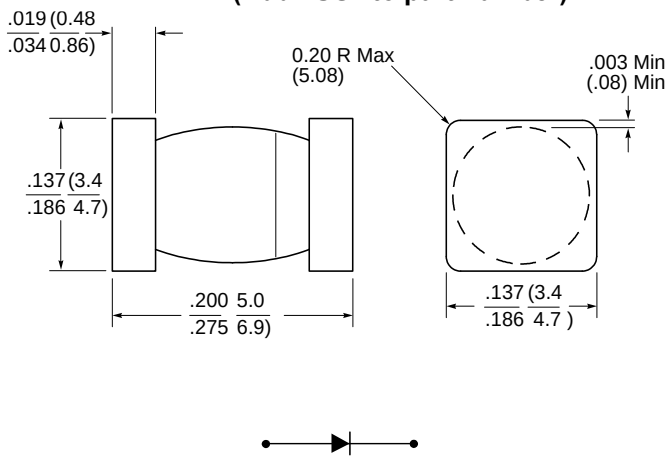
1N5550/US thru 1N5554/US

3A STANDARD RECOVERY RECTIFIERS

SENSITRON SEMICONDUCTOR

TECHNICAL DATA
DATA SHEET 126, REV G.3

MELF (Add "US" to part number)



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*