MAXIMUM RATINGS

Notes: 1. At .375 inch (9.52 mm) lead length from body.
2. Derate linearly at 22.2 mA/ºC from +55 ºC to +100 °C.
3. These I_O ratings are for a thermally (PC boards or other) mounting methods where the lead or end-cap temperatures cannot be maintained and where thermal resistance from mounting point to ambient is still sufficiently controlled where $T_{J(MAX)}$ does not exceed 175 °C. This equates to $R_{\theta JX} \leq 47$ ºC/W.
4. Derate linearly at 26.7 mA/°C above T_A= +100 °C to +175 °C ambient.

MECHANICAL and PACKAGING

- CASE: Hermetically sealed voidless hard glass with tungsten slugs.
- TERMINALS: Axial-leads are tin/lead (Sn/Pb) over copper. RoHS compliant matte-tin is available for commercial only.
- MARKING: Body paint and part number.
- POLARITY: Cathode band.
- TAPE & REEL option: Standard per EIA-296. Consult factory for quantities.
- WEIGHT: 750 milligrams.
- See Package Dimensions on last page.

PART NOMENCLATURE

JAN 1N5550 (e3)

Reliability Level
JAN = JAN Level
JANTX = JANTX Level
JANTXV = JANTXV Level
JANS = JANS Level
Blank = commercial

JEDEC type number
See Electrical Characteristics table

RoHS Compliance
e3 = RoHS compliant (available on commercial grade only)
Blank = non-RoHS compliant

SYMBOLS & DEFINITIONS

Symbol	Definition
V_{BR}	Minimum Breakdown Voltage: The minimum voltage the device will exhibit at a specified current.
V_{RWM}	Working Peak Reverse Voltage: The maximum peak voltage that can be applied over the operating temperature range excluding all transient voltages (ref JESD282-B).
I_O	Average Rectified Output Current: The Output Current averaged over a full cycle with a 50 Hz or 60 Hz sine-wave input and a 180 degree conduction angle.
V_F	Maximum Forward Voltage: The maximum forward voltage the device will exhibit at a specified current.
I_R	Maximum Reverse Current: The maximum reverse (leakage) current that will flow at the specified voltage and temperature.
t_{rr}	Reverse Recovery Time: The time interval between the instant the current passes through zero when changing from the forward direction to the reverse direction and a specified decay point after a peak reverse current occurs.

ELECTRICAL CHARACTERISTICS @ T_A = 25 °C unless otherwise noted.

TYPE	MINIMUM BREAKDOWN VOLTAGE V_{BR} I_R @ 50 µA Volts	FORWARD VOLTAGE V_F @ I_F = 9 A (pk)		MAXIMUM REVERSE CURRENT I_R @ V_{RWM} µA	REVERSE RECOVERY t_{rr} (Note 1) µs
		MIN. Volts	MAX. Volts		
1N5550	220	0.6 V (pk)	1.2 V (pk)	1.0	2.0
1N5551	440	0.6 V (pk)	1.2 V (pk)	1.0	2.0
1N5552	660	0.6 V (pk)	1.2 V (pk)	1.0	2.0
1N5553	880	0.6 V (pk)	1.3 V (pk)	1.0	2.0
1N5554	1100	0.6 V (pk)	1.3 V (pk)	1.0	2.0

NOTE 1: I_F = 0.5 A, I_{RM} = 1.0 A, $I_{R(REC)}$ = .250 A.

GRAPHS

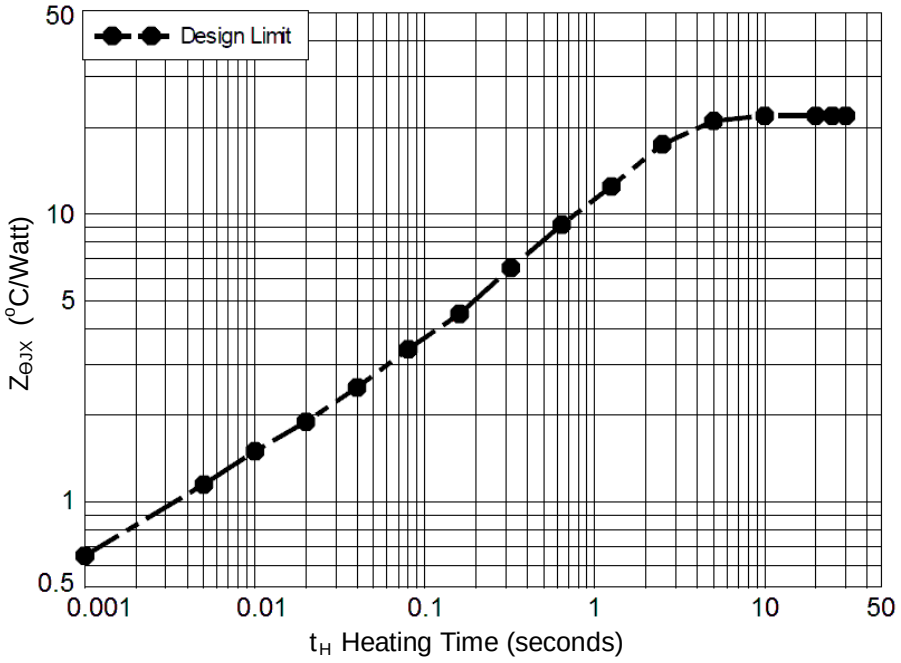


FIGURE 1
Maximum Thermal Impedance

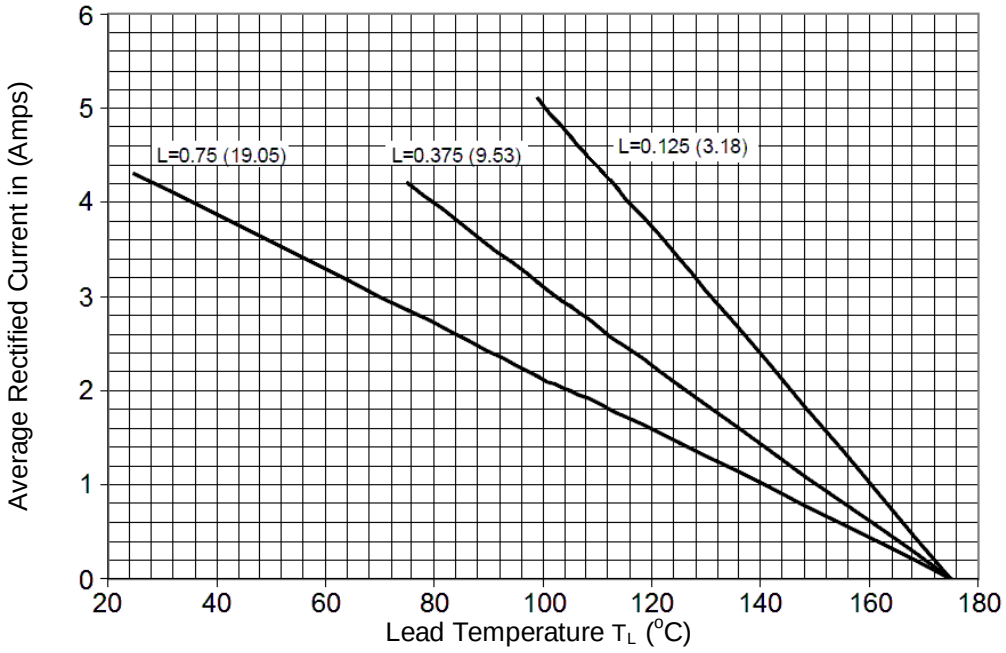


FIGURE 2
Maximum Current vs. Lead Temperature

NOTES: 1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.

GRAPHS (continued)

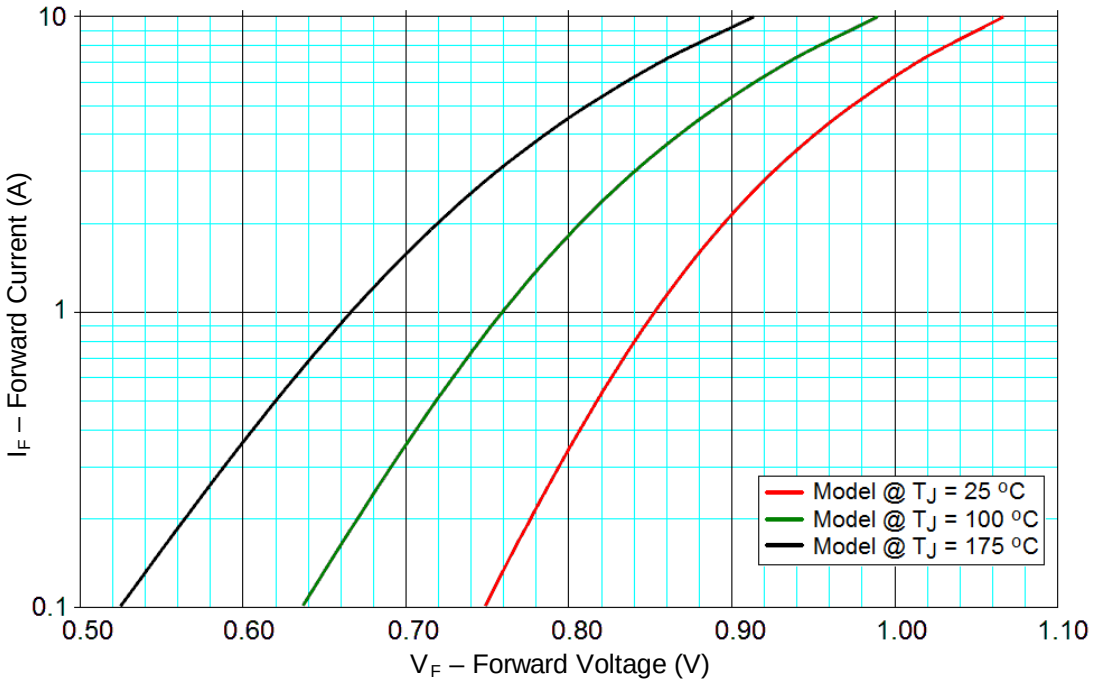
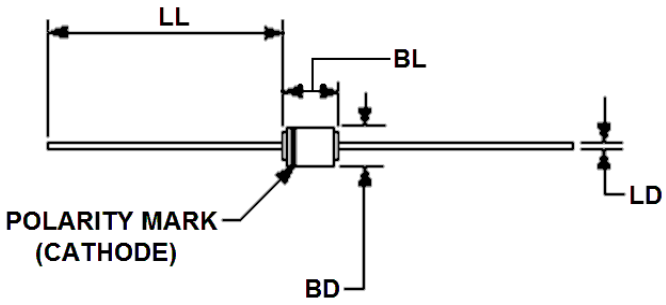


FIGURE 3
Typical Forward Voltage vs. Forward Current

PACKAGE DIMENSIONS



Ltr	Dimensions				Notes
	Inch		Millimeters		
	Min	Max	Min	Max	
BD	0.115	0.180	2.92	4.57	3, 4
BL	0.130	0.300	3.30	7.62	4
LD	0.036	0.042	0.92	1.07	
LL	0.900	1.300	22.86	33.02	

NOTES:

1. Dimensions are in inches.
2. Millimeter equivalents are given for general information only.
3. The BL dimension shall include the entire body including slugs and sections of the lead over which the diameter is uncontrolled. This uncontrolled area is defined as the zone between the edge of the diode body and extending .050 inch (1.27 mm) onto the leads.
4. Dimension BD shall be measured at the largest diameter.
5. In accordance with ASME Y14.5M, diameters are equivalent to Φx symbology.