



## Features:

- Silicon Planar Power Zener Diodes
- Standard Zener Voltage Tolerance is  $\pm 5\%$ . with a "B" Suffix. Other Tolerances are Available Upon Request

## Mechanical Data:

- Case: DO-35, Glass Case
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Type Number
- Approx. Weight: 0.13g

## Maximum Ratings and Electrical Characteristics:

Ratings at 25 ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate by 20%.

Characteristics	Symbol	Value	Unit
Power dissipation at $T_a=25^\circ\text{C}$ (Note 1)	$P_{\text{tot}}$	500	mW
Junction temperature	$T_J$	175	$^\circ\text{C}$
Storage temperature range	$T_s$	-55 to +175	$^\circ\text{C}$

Characteristics	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance junction to ambient (Note 1)	$R_{\theta JA}$	-	-	300	$^\circ\text{C}/\text{W}$
Forward voltage at $I_F=200\text{mA}$	$V_F$	-	-	1.2	V

## Notes:

(1) Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature

## Electrical Characteristics:

(T<sub>A</sub>=25°C)

Part Number	Nominal Zener Voltage (Note 1)	Test Current	Maximum Dynamic Impedance (Note 1)		Typical Temperature of Coefficient	Maximum Reverse Leakage Current	
	V <sub>Z</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub> @I <sub>ZT</sub>	Z <sub>ZK</sub> @I <sub>ZK</sub> =0.25mA	αV <sub>Z</sub> @I <sub>ZT</sub>	I <sub>RM</sub>	V <sub>R</sub>
	V	mA	Ω	Ω	%/°C	A	V
1N5231B-T	5.1	20	17	1,600	+0.03	5	2
1N5232B-T	5.6		11		+0.038		3
1N5236B-T	7.5		6		+0.058		6
1N5250B-T	20	6.2	25	600	+0.086	0.1	15

### Notes:

(1) Based on dc-measurement at thermal equilibrium; lead length=9.5 (3/8"); thermal resistance of heat sink=30k/W.

Fig. 1 - Breakdown Characteristics

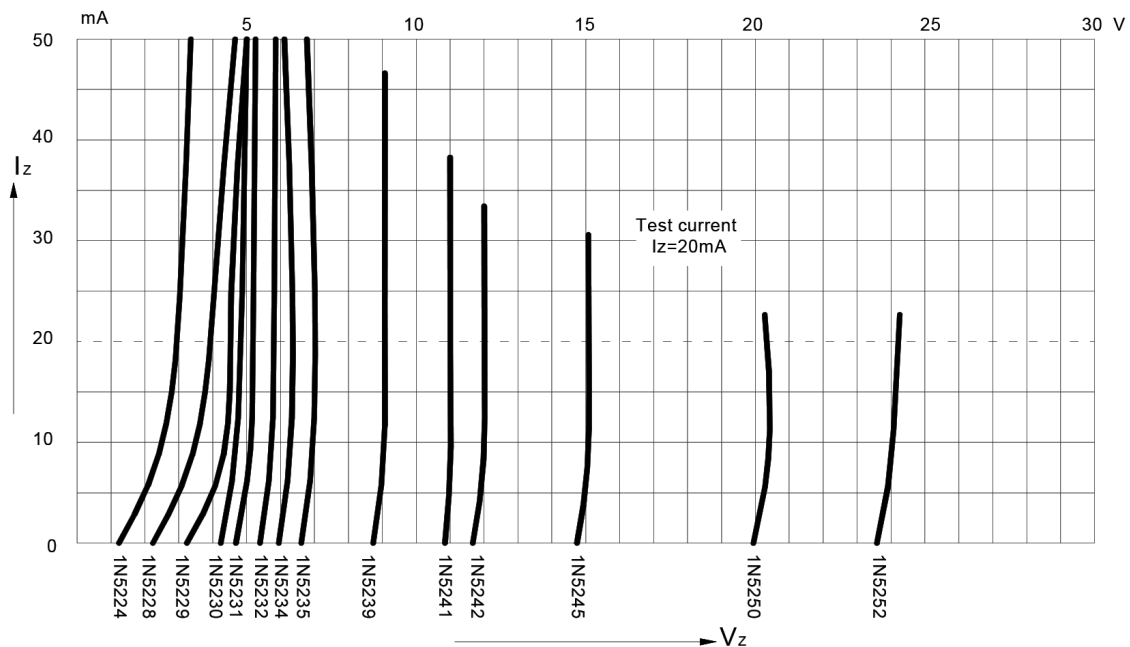
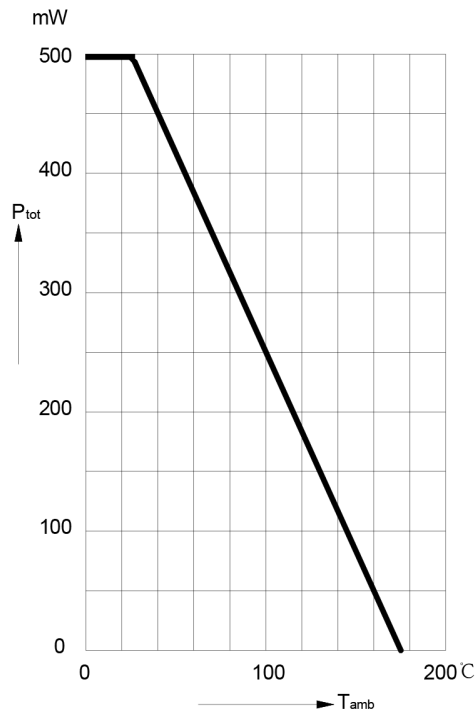
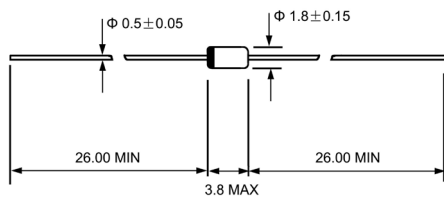


Fig. 2 - Admissible Power Dissipation Versus Ambient Temperature



## Dimensions:



DO-35(GLASS)

Dimensions : Millimetres

## Part Number Table

Description	Part Number
Zener Diodes	1N5231B-T
	1N5232B-T
	1N5236B-T
	1N5250B-T

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