Zener Diodes

Features:

- Silicon Planar Power Zener Diodes
- Standard Zener Voltage Tolerance is ±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°C (Note 1)	P_{tot}	500	mW
Junction temperature	T_J	175	°C
Storage temperature range	T_s	-55 to +175	°C

Characteristics	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance junction to ambient (Note 1)	$R_{\theta JA}$	-	-	300	°C/W
Forward voltage at I_F=200mA	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_A=25°C)

Part Number	Nominal Zener Voltage (Note 1)	Test Current	Maximum Dynamic Impedance (Note 1)		Typical Temperature of Coeffizient	Maximum Reverse Leakage Current	
	V_Z	I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@ I_{ZK}=0.25mA	αV_Z@I_{ZT}	I_{RM}	V_R
	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	500	+0.058	3	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

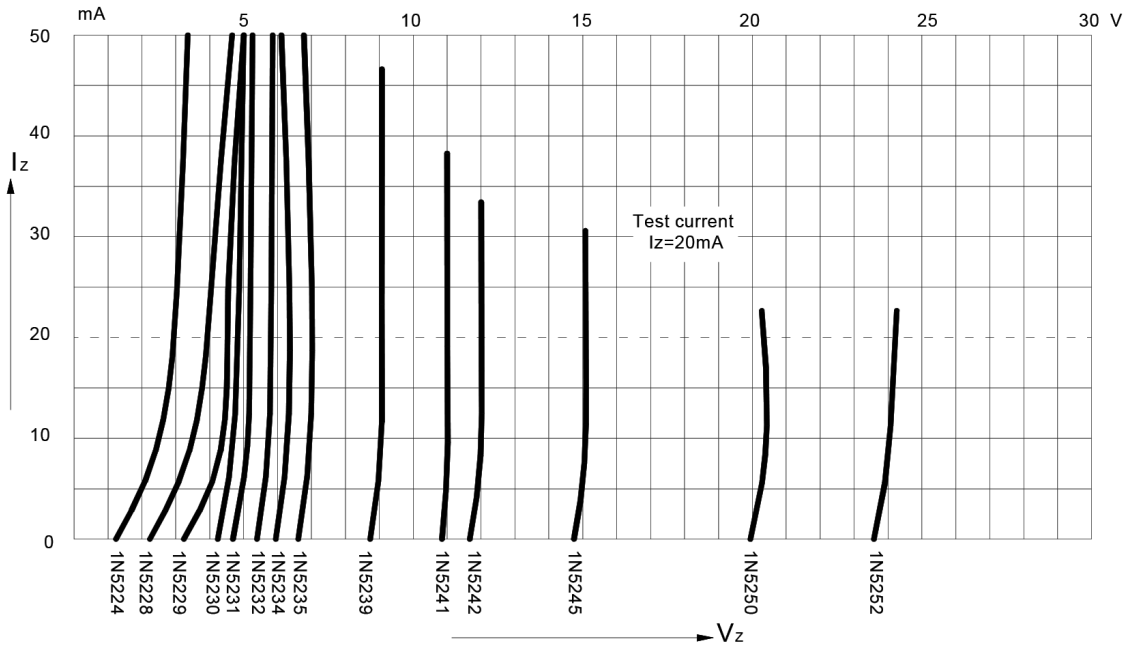
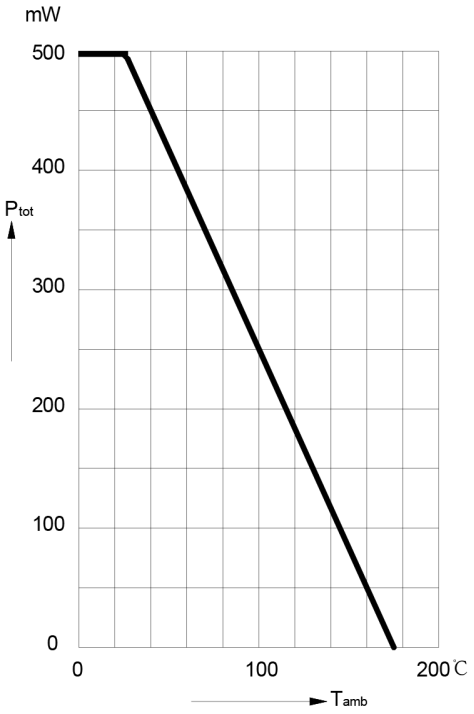
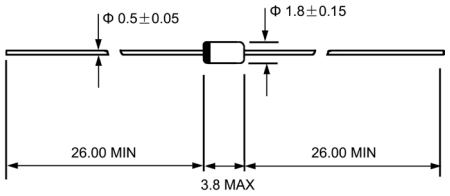


Fig. 2 - Admissible Power Dissipation Versus Ambient Temperature



Dimensions:



DO-35(GLASS)

Dimensions : Millimetres

Part Number Table

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