



# Zeners

## 1N957B - 1N973B

Zeners (1N957B - 1N973B)

### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

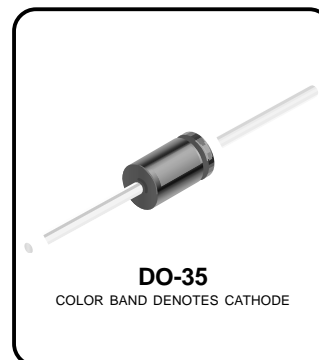
Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	500	mW
$T_{STG}$	Storage Temperature Range	-65 to +200	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	+ 175	$^\circ\text{C}$
	Lead Temperature (1/16" from case for 10 seconds)	+ 230	$^\circ\text{C}$

\*These ratings are limiting values above which the serviceability of the diode may be impaired.

#### NOTES:

- 1) These ratings are based on a maximum junction temperature of 200 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Tolerance: B = 5%



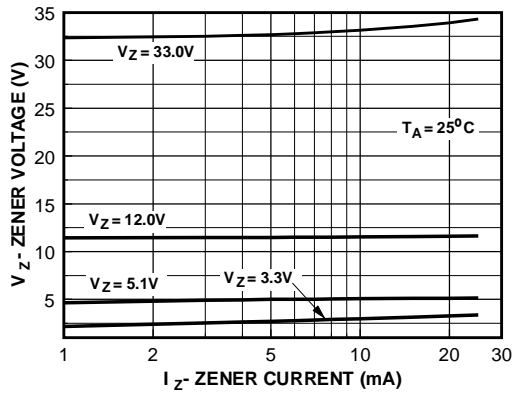
### Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

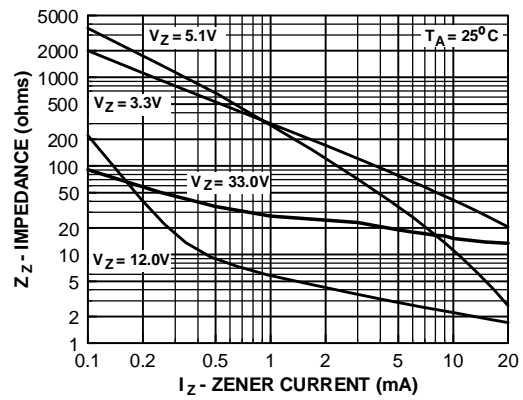
Device	$V_Z(\text{V})$	$Z_Z(\Omega)$ @ $I_Z(\text{mA})$	$Z_{ZK}(\Omega)$ @ $I_{ZK}(\text{mA})$	$I_R(\mu\text{A})$ @ $V_R(\text{V})$	$T_C$ (%/ $^\circ\text{C}$ )	$I_{ZRM}^*(\text{mA})$
1N957B	6.8	4.5 18.5	700 1.0	150 5.2	0.05	47
1N958B	7.5	5.5 16.5	700 0.5	75 5.7	0.058	42
1N959B	8.2	6.5 15	700 0.5	50 6.2	0.062	38
1N960B	9.1	7.5 14	700 0.5	25 6.9	0.068	35
1N961B	10	8.5 12.5	700 0.25	10 7.6	0.072	32
1N962B	11	9.5 11.5	700 0.25	5 8.4	0.073	28
1N963B	12	11.5 10.5	700 0.25	5 9.1	0.076	26
1N964B	13	13 9.5	700 0.25	5 9.9	0.079	24
1N965B	15	16 8.5	700 0.25	5 11.4	0.082	21
1N966B	16	17 7.8	700 0.25	5 12.2	0.083	19
1N967B	18	21 7.0	750 0.25	5 13.7	0.085	17
1N968B	20	25 6.2	750 0.25	5 15.2	0.086	15
1N969B	22	29 5.6	750 0.25	5 16.7	0.087	14
1N970B	24	33 5.2	750 0.25	5 18.2	0.088	13
1N971B	27	41 4.6	750 0.25	5 20.6	0.090	11
1N972B	30	49 4.2	1,000 0.25	5 22.8	0.091	10
1N973B	33	58 3.8	1,000 0.25	5 25.1	0.092	9.2

\* $I_{ZRM}$  (Maximum Zener Current Rating) Values shown are based on the JEDEC rating of 400 milliwatts. Where the actual zener voltage ( $V_Z$ ) is known at the operating point, the maximum zener current may be increased and is limited by the derating curve.

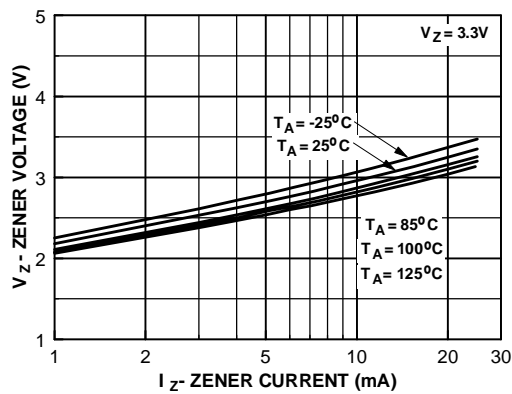
## Typical Characteristics



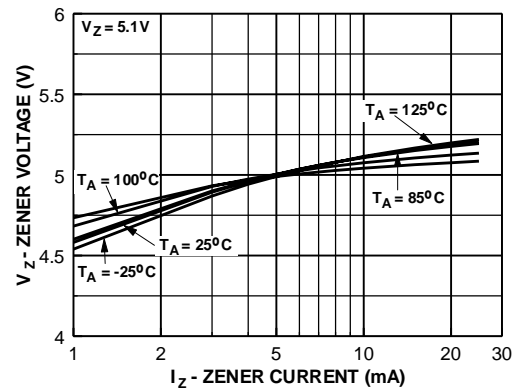
Zener Current vs. Zener Voltage



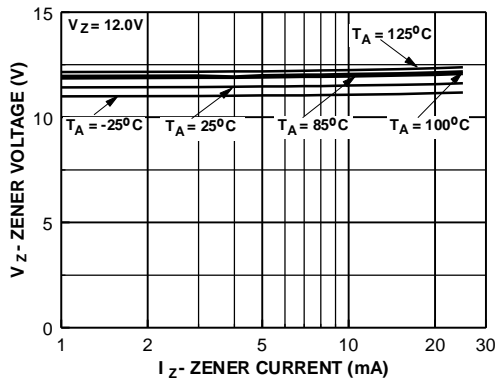
Zener Current vs. Zener Impedance



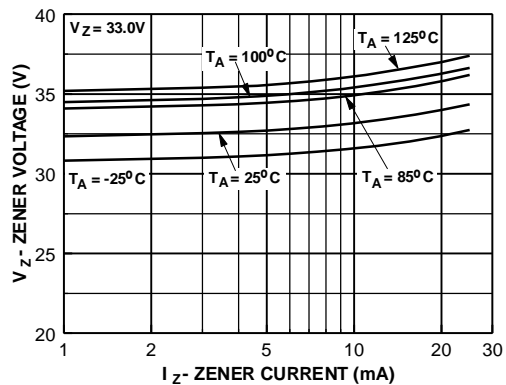
3.3 Zener Voltage vs. Temperature



5.1 Zener Voltage vs. Temperature



12 Zener Voltage vs. Zener Temperature



33 Zener Voltage vs. Zener Temperature

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