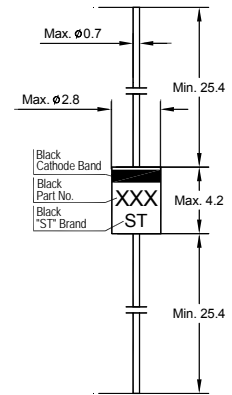


# BZX85B

## SILICON PLANAR POWER ZENER DIODES

for use in stabilizing and clipping circuits with high power rating.



Glass Case DO-41  
Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

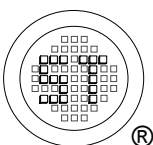
Parameter	Symbol	Value	Unit
Power Dissipation	$P_{\text{tot}}$	1.3 <sup>1)</sup>	W
Junction Temperature	$T_j$	200	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{Stg}}$	- 55 to + 200	$^\circ\text{C}$

<sup>1)</sup> Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\text{thA}}$	130 <sup>1)</sup>	K/W
Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	1.2	V

<sup>1)</sup> Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.



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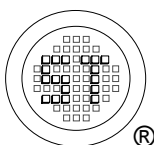
Dated : 12/06/2007

# BZX85B

## Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Type	Zener Voltage Range <sup>1)</sup>			Maximum Dynamic Resistance			Maximum Reverse Leakage Current	
	$V_{Znom}$ V	$I_{ZT}$ mA	for $V_{ZT}$ V	$r_{ZJT}$ $\Omega$	$r_{ZJK}$ $\Omega$	at $I_{ZK}$ mA	$I_R$ $\mu\text{A}$	at $V_R$ V
BZX85B5V1	5.1	45	4.99...5.2	10	500	1	1	1.5
BZX85B5V6	5.6	45	5.49...5.71	7	400	1	1	2
BZX85B6V2	6.2	35	6.07...6.32	4	300	1	1	3
BZX85B6V8	6.8	35	6.66...6.94	3.5	300	1	1	4
BZX85B7V5	7.5	35	7.35...7.65	3	200	0.5	1	4.5
BZX85B8V2	8.2	25	8.04...8.36	5	200	0.5	1	6.2
BZX85B9V1	9.1	25	8.92...9.28	5	200	0.5	1	6.8
BZX85B10	10	25	9.8...10.2	7	200	0.5	0.5	7
BZX85B11	11	20	10.8...11.2	8	300	0.5	0.5	8.2
BZX85B12	12	20	11.8...12.2	9	350	0.5	0.5	9.1
BZX85B13	13	20	12.7...13.3	10	400	0.5	0.5	10
BZX85B15	15	15	14.7...15.3	15	500	0.5	0.5	11
BZX85B16	16	15	15.7...16.3	15	500	0.5	0.5	12
BZX85B18	18	15	17.6...18.4	20	500	0.5	0.5	13
BZX85B20	20	10	19.6...20.4	24	600	0.5	0.5	15
BZX85B22	22	10	21.6...22.5	25	600	0.5	0.5	16
BZX85B24	24	10	23.5...24.5	25	600	0.5	0.5	18
BZX85B27	27	8	26.4...27.6	30	750	0.25	0.5	20
BZX85B30	30	8	29.4...30.6	30	1000	0.25	0.5	22
BZX85B33	33	8	32.3...33.7	35	1000	0.25	0.5	24
BZX85B36	36	8	35.2...36.8	40	1000	0.25	0.5	27
BZX85B39	39	6	38.2...39.8	50	1000	0.25	0.5	30
BZX85B43	43	6	42.1...43.9	50	1000	0.25	0.5	33
BZX85B47	47	4	46...48	90	1500	0.25	0.5	36

<sup>1)</sup> Tested with pulses  $t_p = 20\text{ ms}$ .



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