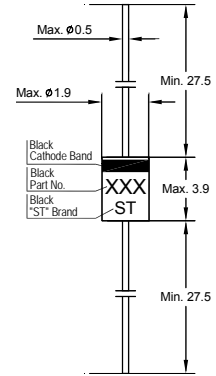


# BZX79B

## SILICON PLANAR ZENER DIODES

### Features

- Tolerance  $\pm 2\%$



Glass Case DO-35  
Dimensions in mm

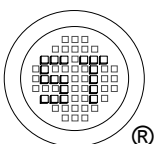
### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Continuous Forward Current	$I_F$	250	mA
Power Dissipation	$P_{tot}$	500 <sup>1)</sup>	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3 <sup>1)</sup>	$^\circ\text{C}/\text{mW}$
Junction Temperature	$T_j$	- 65 to + 200	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 65 to + 200	$^\circ\text{C}$

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

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	$V_F$	1.5	V



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company  
listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098

Dated : 21/06/2007

# BZX79B

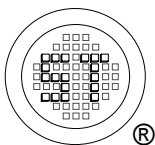
## Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Type	Zener Voltage <sup>1), 3)</sup>			Maximum Zener Impedance <sup>2)</sup>	Maximum Leakage Current	
	Min.	Max.	$I_{ZT}$ (mA)	$Z_{ZT}$ ( $\Omega$ ) at $I_{ZT}$	$I_R$ ( $\mu\text{A}$ )	at $V_R$ (V)
BZX79B2V7	2.64	2.76	5	100	75	1
BZX79B3V0	2.94	3.06	5	95	50	1
BZX79B3V3	3.23	3.37	5	95	25	1
BZX79B3V6	3.52	3.68	5	90	15	1
BZX79B3V9	3.82	3.98	5	90	10	1
BZX79B4V3	4.21	4.39	5	90	5	1
BZX79B4V7	4.6	4.8	5	80	3	2
BZX79B5V1	4.99	5.21	5	60	2	2
BZX79B5V6	5.48	5.72	5	40	1	2
BZX79B6V2	6.07	6.33	5	10	3	4
BZX79B6V8	6.66	6.94	5	15	2	4
BZX79B7V5	7.35	7.65	5	15	1	5
BZX79B8V2	8.03	8.37	5	15	0.7	5
BZX79B9V1	8.91	9.29	5	15	0.5	6
BZX79B10	9.8	10.2	5	20	0.2	7
BZX79B11	10.78	11.22	5	20	0.1	8
BZX79B12	11.76	12.24	5	25	0.1	8
BZX79B13	12.74	13.26	5	30	0.1	8
BZX79B15	14.7	15.3	5	30	0.05	10.5
BZX79B16	15.68	16.32	5	40	0.05	11.2
BZX79B18	17.64	18.36	5	45	0.05	12.6
BZX79B20	19.60	20.4	5	55	0.05	14
BZX79B22	21.56	22.44	5	55	0.05	15.4
BZX79B24	23.52	24.48	5	70	0.05	16.8
BZX79B27	26.46	27.54	2	80	0.05	18.9
BZX79B30	29.4	30.6	2	80	0.05	21
BZX79B33	32.34	33.66	2	80	0.05	23.1
BZX79B36	35.28	36.72	2	90	0.05	25.2
BZX79B39	38.22	39.78	2	130	0.05	27.3
BZX79B43	42.14	43.86	2	150	0.05	30.1
BZX79B47	46.06	47.94	2	170	0.05	32.9
BZX79B51	49.98	52.02	2	180	0.05	35.7
BZX79B56	54.88	57.12	2	200	0.05	39.2
BZX79B62	60.76	63.24	2	215	0.05	43.4
BZX79B68	66.64	69.36	2	240	0.05	47.6
BZX79B75	73.5	76.5	2	255	0.05	52.5
BZX79B82	80.36	83.64	2	280	0.1	62
BZX79B91	89.18	92.82	2	300	0.1	69
BZX79B100	98	102	1	500	0.1	76
BZX79B110	107.8	112.2	1	650	0.1	84
BZX79B120	117.6	122.4	1	800	0.1	91
BZX79B130	127.4	132.6	1	950	0.1	99
BZX79B150	147	153	1	1250	0.1	114
BZX79B160	156.8	163.2	1	1400	0.1	122
BZX79B180	176.4	183.6	1	1700	0.1	137
BZX79B200	196	204	1	2000	0.1	152

<sup>1)</sup> Zener voltage is measured under pulse conditions such that  $T_j$  is no more than  $2\text{ }^\circ\text{C}$  above  $T_a$

<sup>2)</sup>  $Z_{ZT}$  is measured by dividing the ac voltage drop across the device by the ac current applied. The specified limits are for  $I_Z$  (ac) =  $0.1I_Z$  (dc) with the ac frequency = 1 KHz

<sup>3)</sup> Tested with pulses  $t_p = 20$  ms.



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