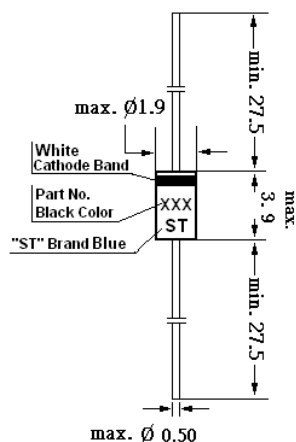
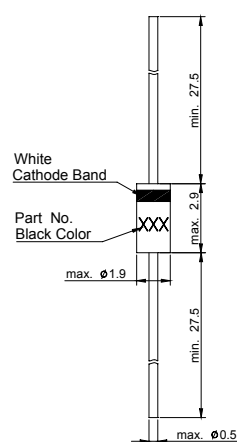


BZX55B

SILICON PLANAR ZENER DIODES



Glass case JEDEC DO-35
Dimensions in mm



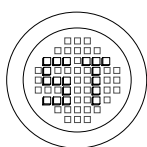
Glass case JEDEC DO-34
Dimensions in mm

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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	- 55 to + 175	$^\circ\text{C}$
¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case			

Characteristics at $T_{\text{amb}} = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	0.3 ¹⁾	K/mW
Forward Voltage at $I_F = 100 \text{ mA}$	V_F	1	V
¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case			



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech 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



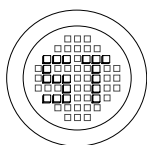
ISO 9001:2000
Certificate No. 0506098

Dated : 09/06/2006

BZX55B

Type	Zener Voltage Range ¹⁾			Dynamic Resistance			Reverse Leakage Current			Temp. coefficient of Zener Voltage
	V _{Znom} V	I _{ZT} mA	for V _{ZT} V	r _{zT} Ω	r _{zjK} Ω	at I _{ZK} mA	T _a = 25°C μA	T _a = 125°C μA	I _R at V _R V	TK _{VZ} %/K
BZX55/B2V0	2.0	5	1.96...2.04	< 85	< 600	1	< 100	< 200	1	-0.09...-0.06
BZX55/B2V2	2.2	5	2.15...2.25	< 85	< 600	1	< 75	< 160	1	-0.09...-0.06
BZX55/B2V4	2.4	5	2.35...2.45	< 85	< 600	1	< 50	< 100	1	-0.09...-0.06
BZX55/B2V7	2.7	5	2.64...2.76	< 85	< 600	1	< 10	< 50	1	-0.09...-0.06
BZX55/B3V0	3.0	5	2.94...3.06	< 85	< 600	1	< 4	< 40	1	-0.08...-0.05
BZX55/B3V3	3.3	5	3.23...3.37	< 85	< 600	1	< 2	< 40	1	-0.08...-0.05
BZX55/B3V6	3.6	5	3.52...3.68	< 85	< 600	1	< 2	< 40	1	-0.08...-0.05
BZX55/B3V9	3.9	5	3.82...3.98	< 85	< 600	1	< 2	< 40	1	-0.08...-0.05
BZX55/B4V3	4.3	5	4.21...4.39	< 75	< 600	1	< 1	< 20	1	-0.06...-0.03
BZX55/B4V7	4.7	5	4.6...4.8	< 60	< 600	1	< 0.5	< 10	1	-0.05...+0.02
BZX55/B5V1	5.1	5	4.99...5.2	< 35	< 550	1	< 0.1	< 2	1	-0.02...+0.02
BZX55/B5V6	5.6	5	5.49...5.71	< 25	< 450	1	< 0.1	< 2	1	-0.05...+0.05
BZX55/B6V2	6.2	5	6.07...6.32	< 10	< 200	1	< 0.1	< 2	2	0.03...0.06
BZX55/B6V8	6.8	5	6.66...6.94	< 8	< 150	1	< 0.1	< 2	3	0.03...0.07
BZX55/B7V5	7.5	5	7.35...7.65	< 7	< 50	1	< 0.1	< 2	5	0.03...0.07
BZX55/B8V2	8.2	5	8.04...8.36	< 7	< 50	1	< 0.1	< 2	6.2	0.03...0.08
BZX55/B9V1	9.1	5	8.92...9.28	< 10	< 50	1	< 0.1	< 2	6.8	0.03...0.09
BZX55/B10	10	5	9.8...10.2	< 15	< 70	1	< 0.1	< 2	7.5	0.03...0.1
BZX55/B11	11	5	10.8...11.2	< 20	< 70	1	< 0.1	< 2	8.2	0.03...0.11
BZX55/B12	12	5	11.8...12.2	< 20	< 90	1	< 0.1	< 2	9.1	0.03...0.11
BZX55/B13	13	5	12.7...13.3	< 26	< 110	1	< 0.1	< 2	10	0.03...0.11
BZX55/B15	15	5	14.7...15.3	< 30	< 110	1	< 0.1	< 2	11	0.03...0.11
BZX55/B16	16	5	15.7...16.3	< 40	< 170	1	< 0.1	< 2	12	0.03...0.11
BZX55/B18	18	5	17.6...18.4	< 50	< 170	1	< 0.1	< 2	13	0.03...0.11
BZX55/B20	20	5	19.6...20.4	< 55	< 220	1	< 0.1	< 2	15	0.03...0.11
BZX55/B22	22	5	21.6...22.5	< 55	< 220	1	< 0.1	< 2	16	0.04...0.12
BZX55/B24	24	5	23.5...24.5	< 80	< 220	1	< 0.1	< 2	18	0.04...0.12
BZX55/B27	27	5	26.4...27.6	< 80	< 220	1	< 0.1	< 2	20	0.04...0.12
BZX55/B30	30	5	29.4...30.6	< 80	< 220	1	< 0.1	< 2	22	0.04...0.12
BZX55/B33	33	5	32.3...33.7	< 80	< 220	1	< 0.1	< 2	24	0.04...0.12
BZX55/B36	36	5	35.2...36.8	< 80	< 220	1	< 0.1	< 2	27	0.04...0.12
BZX55/B39	39	2.5	38.2...39.8	< 90	< 500	0.5	< 0.1	< 5	30	0.04...0.12
BZX55/B43	43	2.5	42.1...43.9	< 90	< 500	0.5	< 0.1	< 5	33	0.04...0.12
BZX55/B47	47	2.5	46...48	< 110	< 600	0.5	< 0.1	< 5	36	0.04...0.12
BZX55/B51	51	2.5	49.9...52.1	< 125	< 700	0.5	< 0.1	< 10	39	0.04...0.12
BZX55/B56	56	2.5	54.8...57.2	< 135	< 700	0.5	< 0.1	< 10	43	0.04...0.12
BZX55/B62	62	2.5	60.7...63.3	< 150	< 1000	0.5	< 0.1	< 10	47	0.04...0.12
BZX55/B68	68	2.5	66.6...69.4	< 200	< 1000	0.5	< 0.1	< 10	51	0.04...0.12
BZX55/B75	75	2.5	73.5...76.5	< 250	< 1000	0.5	< 0.1	< 10	56	0.04...0.12
BZX55/B82	82	2.5	80.3...83.7	< 300	< 1500	0.25	< 0.1	< 10	62	0.05...0.12
BZX55/B91	91	1	89.1...92.9	< 450	< 2000	0.1	< 0.1	< 10	68	0.05...0.12
BZX55/B100	100	1	98...102	< 450	< 5000	0.1	< 0.1	< 10	75	0.05...0.12
BZX55/B110	110	1	107.8...112.2	< 600	< 5000	0.1	< 0.1	< 10	82	0.05...0.12
BZX55/B120	120	1	117.6...122.4	< 800	< 5500	0.1	< 0.1	< 10	91	0.05...0.12
BZX55/B130	130	1	127.4...132.6	< 950	< 6000	0.1	< 0.1	< 10	100	0.05...0.12
BZX55/B150	150	1	147...153	< 1250	< 6500	0.1	< 0.1	< 10	110	0.05...0.12
BZX55/B160	160	1	156.8...163.2	< 1400	< 7000	0.1	< 0.1	< 10	120	0.05...0.12
BZX55/B180	180	1	176.4...183.6	< 1700	< 8500	0.1	< 0.1	< 10	130	0.05...0.12
BZX55/B200	200	1	196...204	< 2000	< 10000	0.1	< 0.1	< 10	150	0.05...0.12

¹⁾ Tested with pulses t_p = 20 ms.



SEMTECH ELECTRONICS LTD.

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

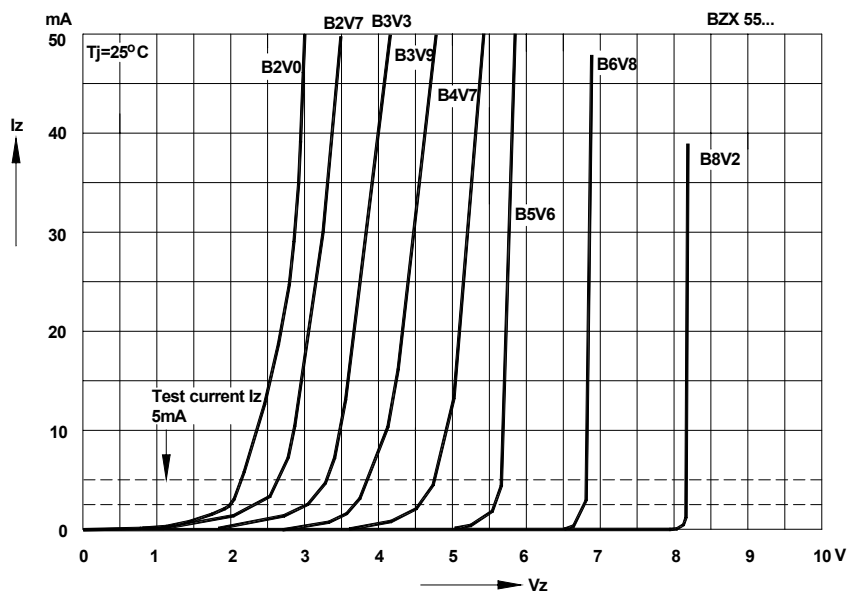
®



Dated : 09/06/2006

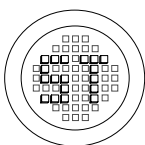
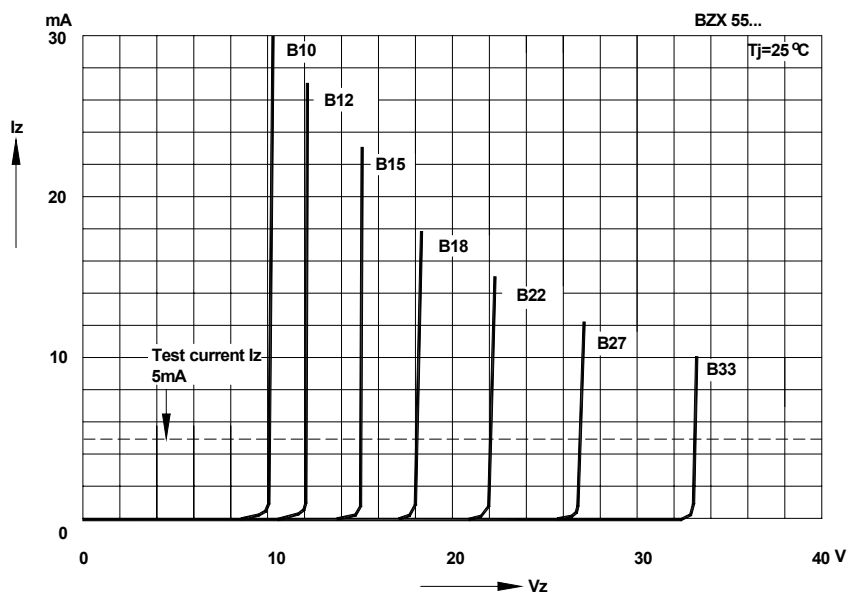
Breakdown characteristics

$T_j = \text{constant (pulsed)}$



Breakdown characteristics

$T_j = \text{constant (pulsed)}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech 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 : 09/06/2006