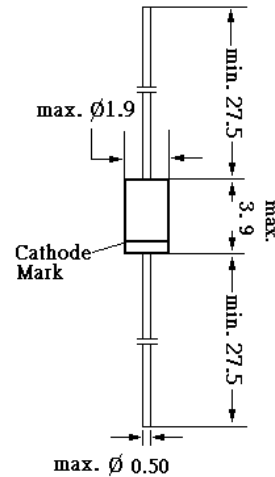


POWER SKY (H.K.) LTD.

BZX55...

SILICON PLANAR ZENER DIODES

The Zener voltages are graded according to the international E 24 standard. Other tolerances and higher Zener voltages are upon request.



Glass case JEDEC DO-35

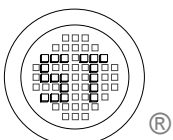
Dimensions in mm

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

	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
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 $T_{\text{amb}} = 25^\circ\text{C}$

	Symbol	Min.	Typ.	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

®

Sales by Power Sky (HK) Ltd.



Dated : 30/04/2003

POWER SKY (H.K.) LTD.

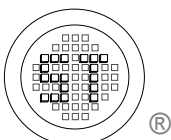
BZX55...

Type	Zener Voltage Range ¹⁾			Dynamic Resistance			Reverse Leakage Current			Temp. coefficient of Zener Voltage
	V _{znom} V	I _{ZT} mA	for V _{ZT} ²⁾ V	r _{ZJT} Ω	r _{ZJK} Ω	at I _{ZK} mA	Ta = 25°C A	Ta = 125°C A	I _R at V _R V	TKvz %/K
BZX 55/C 0V8 ³⁾	0.8	5	0.73...0.83	<8	<50	1	--	--	--	-0.26...-0.23
BZX 55/C 2V0	2.0	5	1.80...2.15	<85	<600	1	<100	<200	1	-0.09...-0.06
BZX 55/C 2V2	2.2	5	2.08...2.33	<85	<600	1	<75	<160	1	-0.09...-0.06
BZX 55/C 2V4	2.4	5	2.28...2.56	<85	<600	1	<50	<100	1	-0.09...-0.06
BZX 55/C 2V7	2.7	5	2.5...2.9	<85	<600	1	<10	<50	1	-0.09...-0.06
BZX 55/C 3V0	3.0	5	2.8...3.2	<85	<600	1	<4	<40	1	-0.08...-0.05
BZX 55/C 3V3	3.3	5	3.1...3.5	<85	<600	1	<2	<40	1	-0.08...-0.05
BZX 55/C 3V6	3.6	5	3.4...3.8	<85	<600	1	<2	<40	1	-0.08...-0.05
BZX 55/C 3V9	3.9	5	3.7...4.1	<85	<600	1	<2	<40	1	-0.08...-0.05
BZX 55/C 4V3	4.3	5	4.0...4.6	<75	<600	1	<1	<20	1	-0.06...-0.03
BZX 55/C 4V7	4.7	5	4.4...5.0	<60	<600	1	<0.5	<10	1	-0.05...+0.02
BZX 55/C 5V1	5.1	5	4.8...5.4	<35	<550	1	<0.1	<2	1	-0.02...+0.02
BZX 55/C 5V6	5.6	5	5.2...6.0	<25	<450	1	<0.1	<2	1	-0.05...+0.05
BZX 55/C 6V2	6.2	5	5.8...6.6	<10	<200	1	<0.1	<2	2	0.03...0.06
BZX 55/C 6V8	6.8	5	6.4...7.2	<8	<150	1	<0.1	<2	3	0.03...0.07
BZX 55/C 7V5	7.5	5	7.0...7.9	<7	<50	1	<0.1	<2	5	0.03...0.07
BZX 55/C 8V2	8.2	5	7.7...8.7	<7	<50	1	<0.1	<2	6.2	0.03...0.08
BZX 55/C 9V1	9.1	5	8.5...9.6	<10	<50	1	<0.1	<2	6.8	0.03...0.09
BZX 55/C 10	10	5	9.4...10.6	<15	<70	1	<0.1	<2	7.5	0.03...0.1
BZX 55/C 11	11	5	10.4...11.6	<20	<70	1	<0.1	<2	8.2	0.03...0.11
BZX 55/C 12	12	5	11.4...12.7	<20	<90	1	<0.1	<2	9.1	0.03...0.11
BZX 55/C 13	13	5	12.4...14.1	<26	<110	1	<0.1	<2	10	0.03...0.11
BZX 55/C 15	15	5	13.8...15.6	<30	<110	1	<0.1	<2	11	0.03...0.11
BZX 55/C 16	16	5	15.3...17.1	<40	<170	1	<0.1	<2	12	0.03...0.11
BZX 55/C 18	18	5	16.8...19.1	<50	<170	1	<0.1	<2	13	0.03...0.11
BZX 55/C 20	20	5	18.8...21.2	<55	<220	1	<0.1	<2	15	0.03...0.11
BZX 55/C 22	22	5	20.8...23.3	<55	<220	1	<0.1	<2	16	0.04...0.12
BZX 55/C 24	24	5	22.8...25.6	<80	<220	1	<0.1	<2	18	0.04...0.12
BZX 55/C 27	27	5	25.1...28.9	<80	<220	1	<0.1	<2	20	0.04...0.12
BZX 55/C 30	30	5	28...32	<80	<220	1	<0.1	<2	22	0.04...0.12
BZX 55/C 33	33	5	31...35	<80	<220	1	<0.1	<2	24	0.04...0.12
BZX 55/C 36	36	5	34...38	<80	<220	1	<0.1	<2	27	0.04...0.12
BZX 55/C 39	39	2.5	37...41	<90	<500	0.5	<0.1	<5	30	0.04...0.12
BZX 55/C 43	43	2.5	40...46	<90	<500	0.5	<0.1	<5	33	0.04...0.12
BZX 55/C 47	47	2.5	44...50	<110	<600	0.5	<0.1	<5	36	0.04...0.12
BZX 55/C 51	51	2.5	48...54	<125	<700	0.5	<0.1	<10	39	0.04...0.12
BZX 55/C 56	56	2.5	52...60	<135	<700	0.5	<0.1	<10	43	0.04...0.12
BZX 55/C 62	62	2.5	58...66	<150	<1000	0.5	<0.1	<10	47	0.04...0.12
BZX 55/C 68	68	2.5	64...72	<200	<1000	0.5	<0.1	<10	51	0.04...0.12
BZX 55/C 75	75	2.5	70...79	<250	<1000	0.5	<0.1	<10	56	0.04...0.12
BZX 55/C 82	82	2.5	77...87	<300	<1500	0.25	<0.1	<10	62	0.05...0.12
BZX 55/C 91	91	1	85...96	<450	<2000	0.1	<0.1	<10	68	0.05...0.12
BZX 55/C 100	100	1	94...106	<450	<5000	0.1	<0.1	<10	75	0.05...0.12
BZX 55/C 110	110	1	104...116	<600	<5000	0.1	<0.1	<10	82	0.05...0.12
BZX 55/C 120	120	1	114...127	<800	<5500	0.1	<0.1	<10	91	0.05...0.12
BZX 55/C 130	130	1	124...141	<950	<6000	0.1	<0.1	<10	100	0.05...0.12
BZX 55/C 150	150	1	138...156	<1250	<6500	0.1	<0.1	<10	110	0.05...0.12
BZX 55/C 160	160	1	153...171	<1400	<7000	0.1	<0.1	<10	120	0.05...0.12
BZX 55/C 180	180	1	168...191	<1700	<8500	0.1	<0.1	<10	130	0.05...0.12
BZX 55/C 200	200	1	188...212	<2000	<10000	0.1	<0.1	<10	150	0.05...0.12

1) Tested with pulses t_p = 20 ms.

2) Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case..

3) The BZX55-C0V8 is a silicon diode with operation in forward direction. Hence, the index of all parameters should be "F" instead of "Z". Connect the cathode lead to the negative pole.



SEMTECH



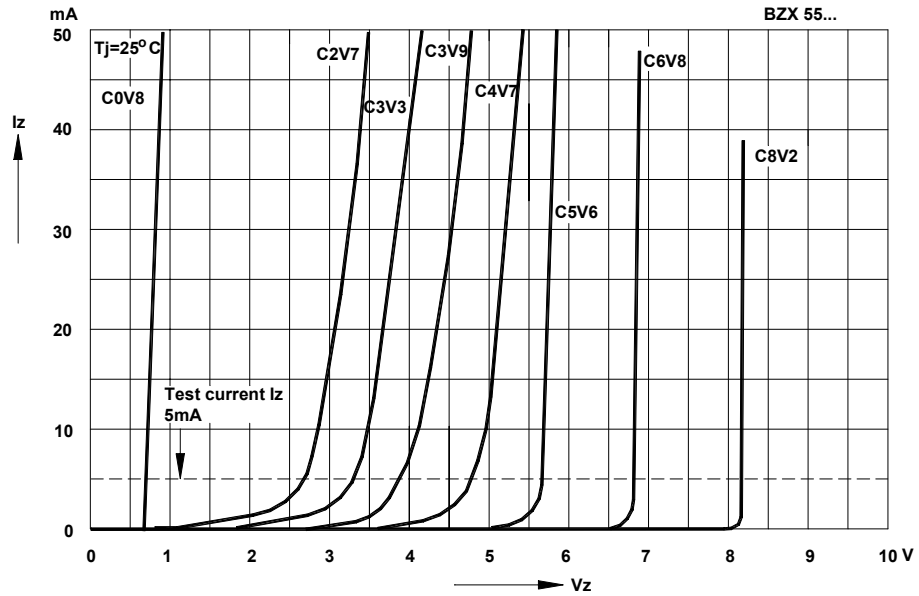
Sales by Power Sky (HK) Ltd.



Dated : 30/04/2003

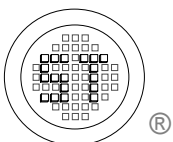
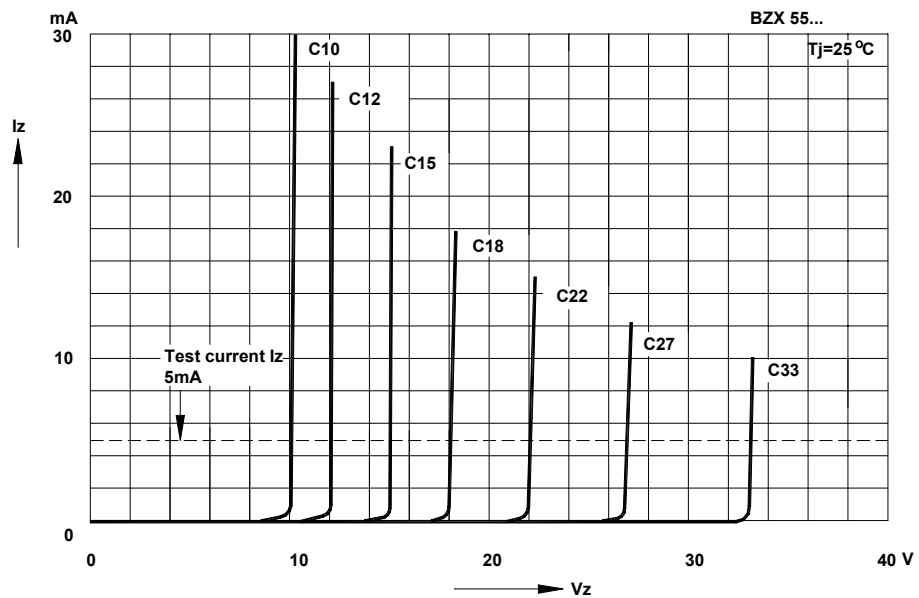
Breakdown characteristics

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



Breakdown characteristics

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



SEMTECH

®

Sales by Power Sky (HK) Ltd.



Dated : 30/04/2003