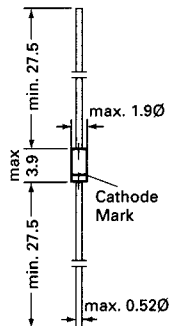


BZX 55... SILICON PLANAR ZENER DIODES

Silicon Planar Zener Diodes

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



Glass case JEDEC DO-35

Dimensions in mm

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

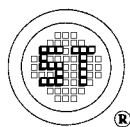
	Symbol	Value	Unit
Zener Current see Table " Characteristics "			
Power Dissipation at $T_{amb} = 25\text{ }^\circ\text{C}$	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to + 175	$^\circ\text{C}$

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

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

	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 ELECTRONICS LTD.
(wholly owned subsidiary of HONEY TECHNOLOGY LTD.)



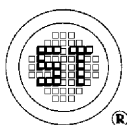
BZX 55 ... SILICON PLANAR ZENER DIODES

Type	Zener Voltage range ¹⁾			Dynamic resistance			Reverse leakage current			Temp. coefficient of Zener Voltage
	V _{Znom} V	I _{ZT} for V _{ZT} ²⁾		r _{zT}	r _{zIK} at I _{ZK}		T _a =25°C	T _a =125°C	I _R at V _R	TK _{VZ}
		mA	V	Ω	Ω	mA	μA	μA	V	%/K
BZX 55/C 0 V 8 ³⁾	0.8	5	0.73 ... 0.83	<8	<50	1	--	--	--	-0.26 ... -0.23
BZX 55/C 2 V 0	2.0	5	1.9 ... 2.1	<85	<600	1	<100	<200	1	-0.09 ... -0.06
BZX 55/C 2 V 2	2.2	5	2.08 ... 2.33	<85	<600	1	<75	<160	1	-0.09 ... -0.06
BZX 55/C 2 V 4	2.4	5	2.28 ... 2.56	<85	<600	1	<50	<100	1	-0.09 ... -0.06
BZX 55/C 2 V 7	2.7	5	2.5 ... 2.9	<85	<600	1	<10	<50	1	-0.09 ... -0.06
BZX 55/C 3 V 0	3.0	5	2.8 ... 3.2	<85	<600	1	<4	<40	1	-0.08 ... -0.05
BZX 55/C 3 V 3	3.3	5	3.1 ... 3.5	<85	<600	1	<2	<40	1	-0.08 ... -0.05
BZX 55/C 3 V 6	3.6	5	3.4 ... 3.8	<85	<600	1	<2	<40	1	-0.08 ... -0.05
BZX 55/C 3 V 9	3.9	5	3.7 ... 4.1	<85	<600	1	<2	<40	1	-0.08 ... -0.05
BZX 55/C 4 V 3	4.3	5	4.0 ... 4.6	<75	<600	1	<1	<20	1	-0.06 ... -0.03
BZX 55/C 4 V 7	4.7	5	4.4 ... 5.0	<60	<600	1	<0.5	<10	1	-0.05 ... +0.02
BZX 55/C 5 V 1	5.1	5	4.8 ... 5.4	<35	<550	1	<0.1	<2	1	-0.02 ... +0.02
BZX 55/C 5 V 6	5.6	5	5.2 ... 6.0	<25	<450	1	<0.1	<2	1	-0.05 ... +0.05
BZX 55/C 6 V 2	6.2	5	5.8 ... 6.6	<10	<200	1	<0.1	<2	2	0.03 ... 0.06
BZX 55/C 6 V 8	6.8	5	6.4 ... 7.2	<8	<150	1	<0.1	<2	3	0.03 ... 0.07
BZX 55/C 7 V 5	7.5	5	7.0 ... 7.9	<7	<50	1	<0.1	<2	5	0.03 ... 0.07
BZX 55/C 8 V 2	8.2	5	7.7 ... 8.7	<7	<50	1	<0.1	<2	6.2	0.03 ... 0.08
BZX 55/C 9 V 1	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.

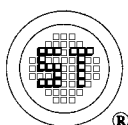
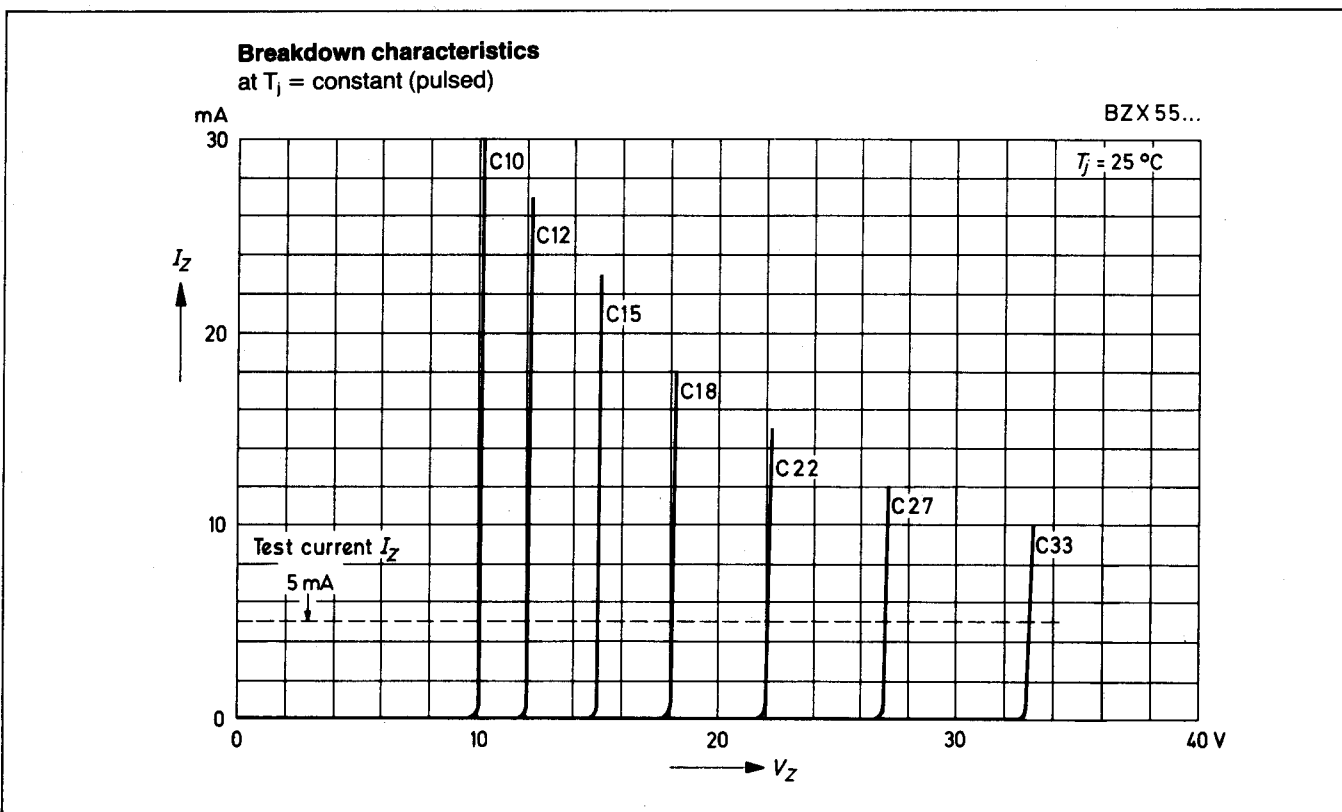
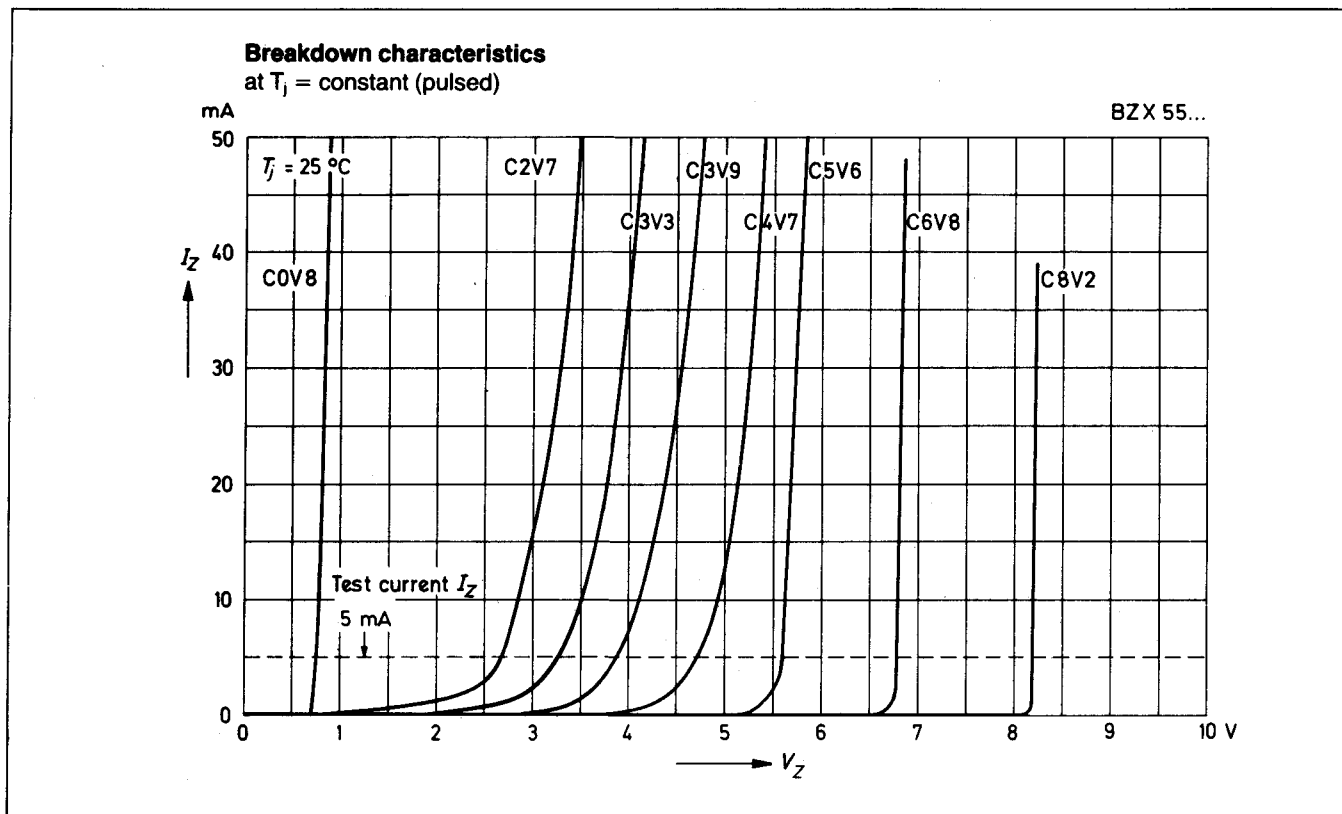


SEMTECH ELECTRONICS LTD.

(wholly owned subsidiary of HONEY TECHNOLOGY LTD.)



BZX 55... SILICON PLANAR ZENER DIODES



SEMTECH ELECTRONICS LTD.

(wholly owned subsidiary of HONEY TECHNOLOGY LTD.)

