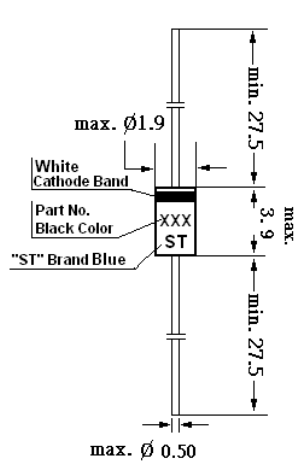


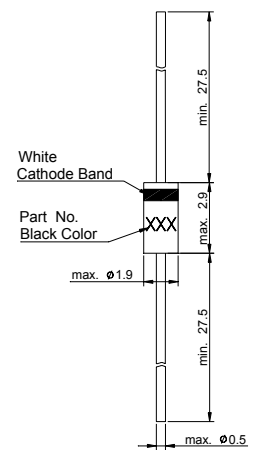
BZX55...

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



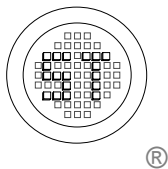
Glass case JEDEC DO-34
Dimensions in mm

Absolute Maximum Ratings (T_a = 25°C)

	Symbol	Value	Unit
Power Dissipation	P _{tot}	500 ¹⁾	mW
Junction Temperature	T _j	175	°C
Storage Temperature Range	T _s	-55 to +175	°C
¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case			

Characteristics at T_{amb} = 25°C

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R _{thA}	-	-	0.3 ¹⁾	K/mW
Forward Voltage at I _F = 100mA	V _F	-	-	1	V
¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case					



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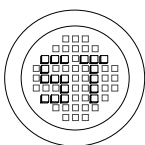
BZX55...

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 μA	Ta = 125°C μA	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.

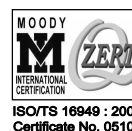
2) Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case

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.



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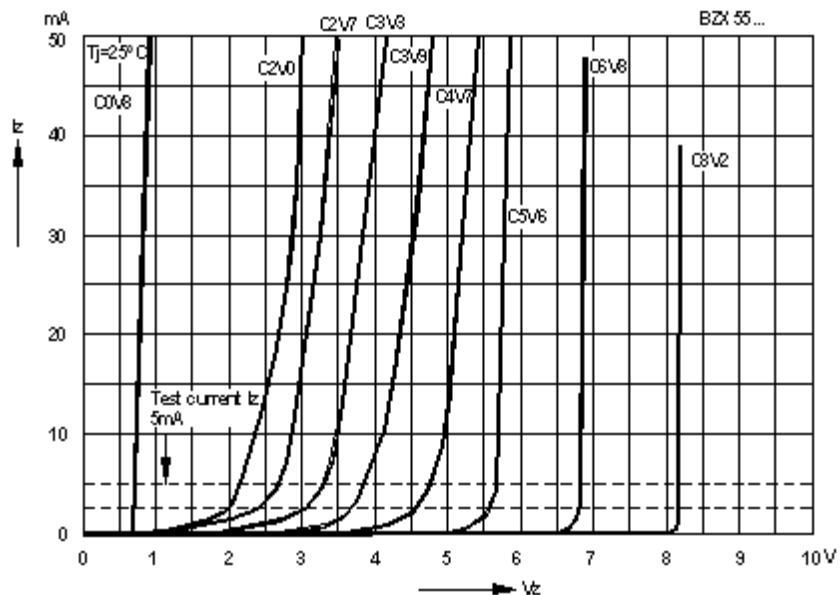
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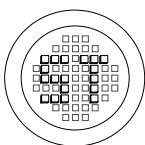
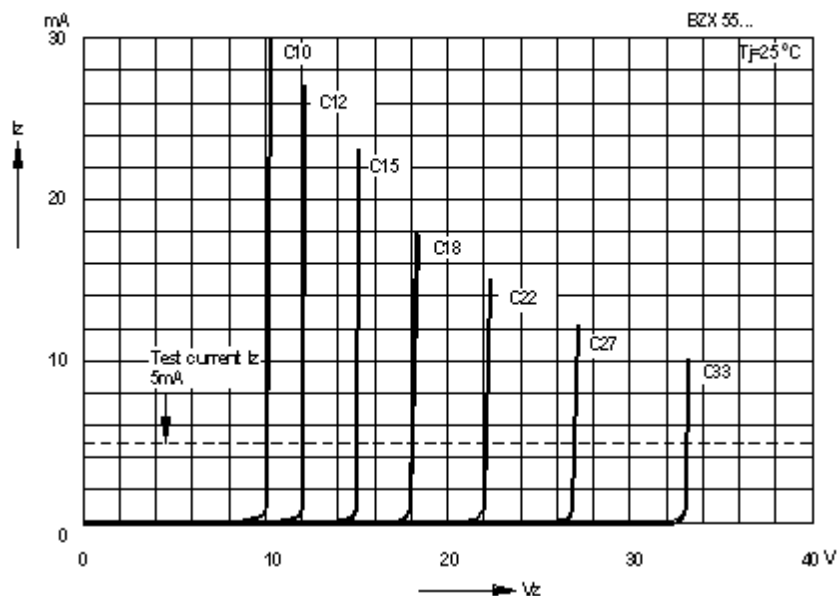
Dated : 03/09/2005

BZX55...

Breakdown characteristics
 $T_J = \text{constant (pulsed)}$



Breakdown characteristics
 $T_J = \text{constant (pulsed)}$



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ISO/TS 16949:2002
 Certificate No. 05103



ISO 14001:2004
 Certificate No. 7116



ISO 9001:2000
 Certificate No. 0506098

Dated : 03/09/2005