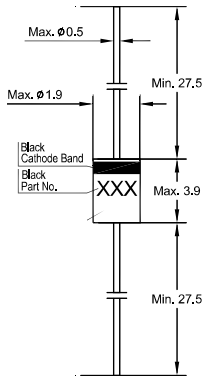
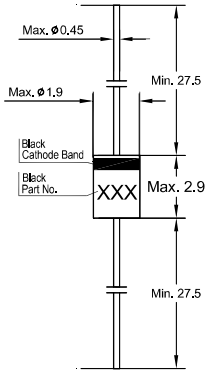
BZX55C

Silicon Planar Zener Diodes

The Zener voltages are graded according to the international E24 standard. Other tolerances and higher Zener voltages are upon request.



Glass Case DO-35
Dimensions in mm



Glass Case DO-34
Dimensions in mm

Absolute Maximum Ratings (T_a = 25℃)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 [1]	mW
Junction Temperature	T_j	175	℃
Storage Temperature Range	T_{stg}	- 55 to + 175	℃
[1] Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.			

Characteristics at T_a = 25℃

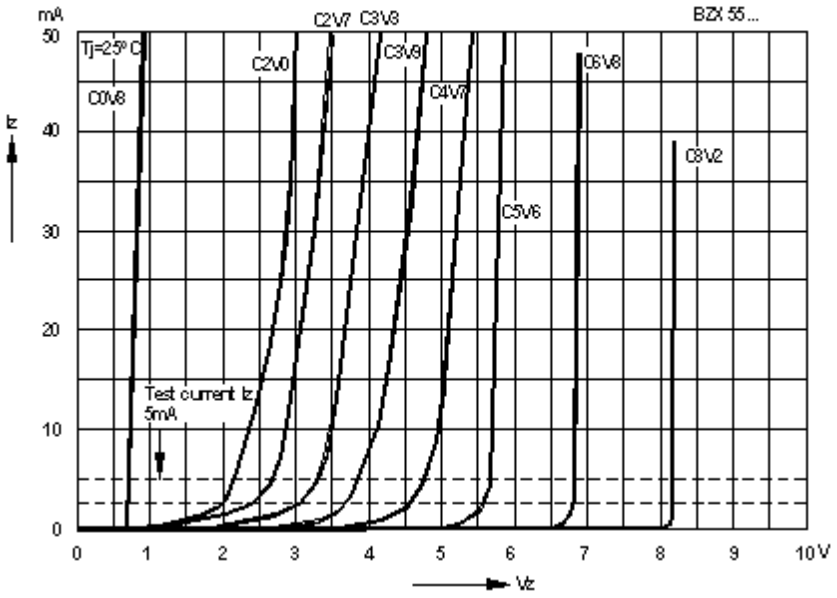
Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	0.3 [1]	K/mW
Forward Voltage at IF = 100 mA	V_F	1	V
[1] Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.			

Type	Zener Voltage Range [1]			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage
	V_{znom}	V_{ZT}	at I_{ZT}	Z_{ZT}	Z_{ZK}	at I_{ZK}	T_a =25°C	T_a =125°C	I_R at V_R	
	(V)	(V)	(mA)	Max. (Ω)	Max. (Ω)	(mA)	Max. (µA)	Max. (µA)	(V)	TKvz (%/K)
BZX55C0V8 [2]	0.8	0.73...0.83	5	8	50	1	-	-	-	-0.26...-0.23
BZX55C2V0	2	1.8...2.15	5	85	600	1	100	200	1	-0.09...-0.06
BZX55C2V2	2.2	2.08...2.33	5	85	600	1	75	160	1	-0.09...-0.06
BZX55C2V4	2.4	2.28...2.56	5	85	600	1	50	100	1	-0.09...-0.06
BZX55C2V7	2.7	2.5...2.9	5	85	600	1	10	50	1	-0.09...-0.06
BZX55C3V0	3	2.8...3.2	5	85	600	1	4	40	1	-0.08...-0.05
BZX55C3V3	3.3	3.1...3.5	5	85	600	1	2	40	1	-0.08...-0.05
BZX55C3V6	3.6	3.4...3.8	5	85	600	1	2	40	1	-0.08...-0.05
BZX55C3V9	3.9	3.7...4.1	5	85	600	1	2	40	1	-0.08...-0.05
BZX55C4V3	4.3	4...4.6	5	75	600	1	1	20	1	-0.06...-0.03
BZX55C4V7	4.7	4.4...5	5	60	600	1	0.5	10	1	-0.05...+0.02
BZX55C5V1	5.1	4.8...5.4	5	35	550	1	0.1	2	1	-0.02...+0.02
BZX55C5V6	5.6	5.2...6	5	25	450	1	0.1	2	1	-0.05...+0.05
BZX55C6V2	6.2	5.8...6.6	5	10	200	1	0.1	2	2	0.03...0.06
BZX55C6V8	6.8	6.4...7.2	5	8	150	1	0.1	2	3	0.03...0.07
BZX55C7V5	7.5	7...7.9	5	7	50	1	0.1	2	5	0.03...0.07
BZX55C8V2	8.2	7.7...8.7	5	7	50	1	0.1	2	6.2	0.03...0.08
BZX55C9V1	9.1	8.5...9.6	5	10	50	1	0.1	2	6.8	0.03...0.09
BZX55C10	10	9.4...10.6	5	15	70	1	0.1	2	7.5	0.03...0.1
BZX55C11	11	10.4...11.6	5	20	70	1	0.1	2	8.2	0.03...0.11
BZX55C12	12	11.4...12.7	5	20	90	1	0.1	2	9.1	0.03...0.11
BZX55C13	13	12.4...14.1	5	26	110	1	0.1	2	10	0.03...0.11
BZX55C15	15	13.8...15.6	5	30	110	1	0.1	2	11	0.03...0.11
BZX55C16	16	15.3...17.1	5	40	170	1	0.1	2	12	0.03...0.11
BZX55C18	18	16.8...19.1	5	50	170	1	0.1	2	13	0.03...0.11
BZX55C20	20	18.8...21.2	5	55	220	1	0.1	2	15	0.03...0.11
BZX55C22	22	20.8...23.3	5	55	220	1	0.1	2	16	0.04...0.12
BZX55C24	24	22.8...25.6	5	80	220	1	0.1	2	18	0.04...0.12
BZX55C27	27	25.1...28.9	5	80	220	1	0.1	2	20	0.04...0.12
BZX55C30	30	28...32	5	80	220	1	0.1	2	22	0.04...0.12
BZX55C33	33	31...35	5	80	220	1	0.1	2	24	0.04...0.12
BZX55C36	36	34...38	5	80	220	1	0.1	2	27	0.04...0.12
BZX55C39	39	37...41	2.5	90	500	0.5	0.1	5	30	0.04...0.12
BZX55C43	43	40...46	2.5	90	500	0.5	0.1	5	33	0.04...0.12
BZX55C47	47	44...50	2.5	110	600	0.5	0.1	5	36	0.04...0.12
BZX55C51	51	48...54	2.5	125	700	0.5	0.1	10	39	0.04...0.12
BZX55C56	56	52...60	2.5	135	700	0.5	0.1	10	43	0.04...0.12
BZX55C62	62	58...66	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
BZX55C68	68	64...72	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
BZX55C75	75	70...79	2.5	250	1000	0.5	0.1	10	56	0.04...0.12
BZX55C82	82	77…87	2.5	300	1500	0.25	0.1	10	62	0.05…0.12

[1] Tested with pulses t_p = 20 ms.

[2] The BZX55C0V8 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.

Breakdown characteristics
Tj = constant (pulsed)



Breakdown characteristics
Tj = constant (pulsed)

