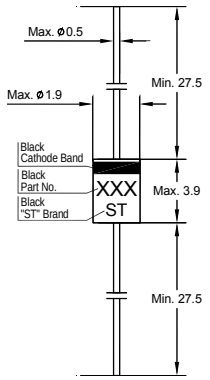
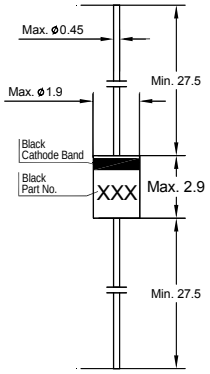
BZX55B

SILICON PLANAR ZENER DIODES



Glass Case DO-35
Dimensions in mm



Glass Case DO-34
Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	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_a = 25 °C

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	0.3 [1]	K/mW
Forward Voltage at I_F = 100 mA	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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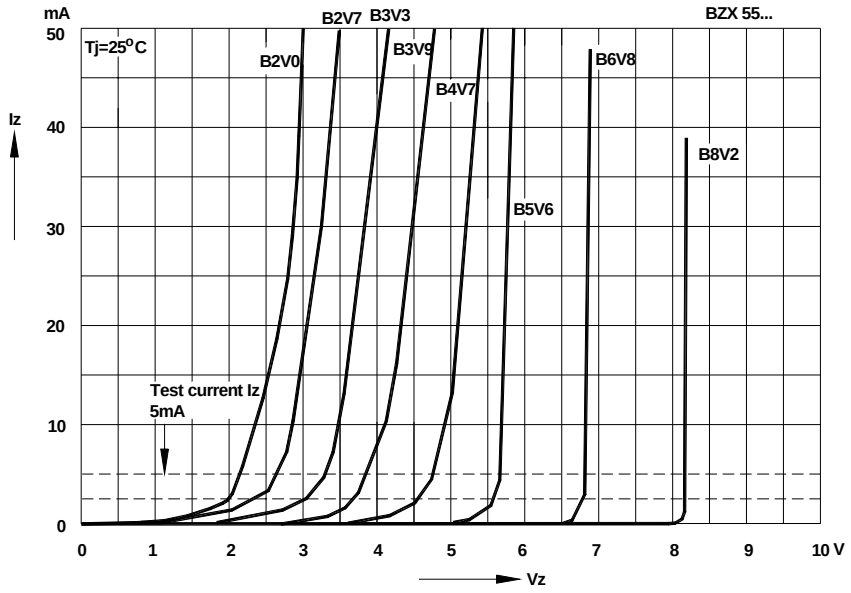
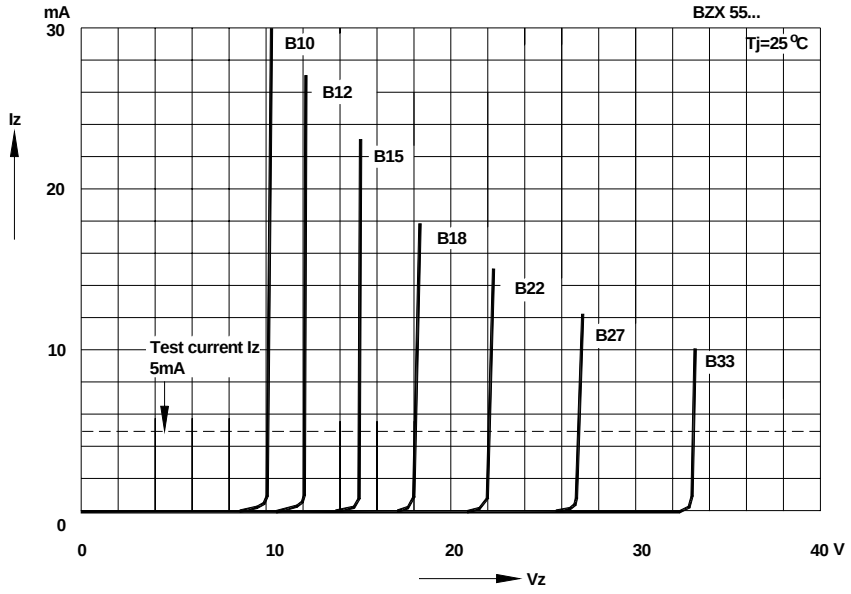
Type	Zener Voltage Range [1]			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage
	V_{znom}	I_{ZT} for	V_{ZT}	r_{ZJT}	r_{ZJK} at	I_{ZK}	T_a = 25°C	T_a=125°C	I_R at V_R	TKvz
	V	mA	V	Max.(Ω)	Max.(Ω)	mA	Max.(μA)	Max.(μA)	V	%/K
BZX55B2V0	2.0	5	1.96…2.04	85	600	1	100	200	1	-0.09...-0.06
BZX55B2V2	2.2	5	2.15…2.25	85	600	1	75	160	1	-0.09...-0.06
BZX55B2V4	2.4	5	2.35…2.45	85	600	1	50	100	1	-0.09...-0.06
BZX55B2V7	2.7	5	2.64…2.76	85	600	1	10	50	1	-0.09...-0.06
BZX55B3V0	3.0	5	2.94…3.06	85	600	1	4	40	1	-0.08...-0.05
BZX55B3V3	3.3	5	3.23…3.37	85	600	1	2	40	1	-0.08...-0.05
BZX55B3V6	3.6	5	3.52…3.68	85	600	1	2	40	1	-0.08...-0.05
BZX55B3V9	3.9	5	3.82…3.98	85	600	1	2	40	1	-0.08...-0.05
BZX55B4V3	4.3	5	4.21…4.39	75	600	1	1	20	1	-0.06...-0.03
BZX55B4V7	4.7	5	4.6…4.8	60	600	1	0.5	10	1	-0.05...+0.02
BZX55B5V1	5.1	5	4.99…5.2	35	550	1	0.1	2	1	-0.02…+0.02
BZX55B5V6	5.6	5	5.49…5.71	25	450	1	0.1	2	1	-0.05…+0.05
BZX55B6V2	6.2	5	6.07…6.32	10	200	1	0.1	2	2	0.03…0.06
BZX55B6V8	6.8	5	6.66…6.94	8	150	1	0.1	2	3	0.03…0.07
BZX55B7V5	7.5	5	7.35…7.65	7	50	1	0.1	2	5	0.03…0.07
BZX55B8V2	8.2	5	8.04…8.36	7	50	1	0.1	2	6.2	0.03…0.08
BZX55B9V1	9.1	5	8.92…9.28	10	50	1	0.1	2	6.8	0.03…0.09
BZX55B10	10	5	9.8…10.2	15	70	1	0.1	2	7.5	0.03…0.1
BZX55B11	11	5	10.8…11.2	20	70	1	0.1	2	8.2	0.03…0.11
BZX55B12	12	5	11.8…12.2	20	90	1	0.1	2	9.1	0.03…0.11
BZX55B13	13	5	12.7…13.3	26	110	1	0.1	2	10	0.03…0.11
BZX55B15	15	5	14.7…15.3	30	110	1	0.1	2	11	0.03…0.11
BZX55B16	16	5	15.7…16.3	40	170	1	0.1	2	12	0.03…0.11
BZX55B18	18	5	17.6…18.4	50	170	1	0.1	2	13	0.03…0.11
BZX55B20	20	5	19.6…20.4	55	220	1	0.1	2	15	0.03…0.11
BZX55B22	22	5	21.6…22.5	55	220	1	0.1	2	16	0.04…0.12
BZX55B24	24	5	23.5…24.5	80	220	1	0.1	2	18	0.04…0.12
BZX55B27	27	5	26.4…27.6	80	220	1	0.1	2	20	0.04…0.12
BZX55B30	30	5	29.4…30.6	80	220	1	0.1	2	22	0.04…0.12
BZX55B33	33	5	32.3…33.7	80	220	1	0.1	2	24	0.04…0.12
BZX55B36	36	5	35.2…36.8	80	220	1	0.1	2	27	0.04…0.12
BZX55B39	39	2.5	38.2…39.8	90	500	0.5	0.1	5	30	0.04…0.12
BZX55B43	43	2.5	42.1…43.9	90	500	0.5	0.1	5	33	0.04…0.12
BZX55B47	47	2.5	46…48	110	600	0.5	0.1	5	36	0.04…0.12
BZX55B51	51	2.5	49.9…52.1	125	700	0.5	0.1	10	39	0.04…0.12
BZX55B56	56	2.5	54.8…57.2	135	700	0.5	0.1	10	43	0.04...0.12
BZX55B62	62	2.5	60.7…63.3	150	1000	0.5	0.1	10	47	0.04...0.12
BZX55B68	68	2.5	66.6…69.4	200	1000	0.5	0.1	10	51	0.04...0.12
BZX55B75	75	2.5	73.5…76.5	250	1000	0.5	0.1	10	56	0.04...0.12
BZX55B82	82	2.5	80.3…83.7	300	1500	0.25	0.1	10	62	0.05...0.12
BZX55B91	91	1	89.1…92.9	450	2000	0.1	0.1	10	68	0.05...0.12
BZX55B100	100	1	98…102	450	5000	0.1	0.1	10	75	0.05...0.12
BZX55B110	110	1	107.8…112.2	600	5000	0.1	0.1	10	82	0.05...0.12
BZX55B120	120	1	117.6…122.4	800	5500	0.1	0.1	10	91	0.05...0.12
BZX55B130	130	1	127.4…132.6	950	6000	0.1	0.1	10	100	0.05...0.12
BZX55B150	150	1	147…153	1250	6500	0.1	0.1	10	110	0.05...0.12
BZX55B160	160	1	156.8…163.2	1400	7000	0.1	0.1	10	120	0.05...0.12
BZX55B180	180	1	176.4…183.6	1700	8500	0.1	0.1	10	130	0.05...0.12
BZX55B200	200	1	196…204	2000	10000	0.1	0.1	10	150	0.05...0.12

[1] Tested with pulses t_p = 20 ms.

Breakdown characteristics

T_j = constant (pulsed)



Breakdown characteristics

T_j = constant (pulsed)