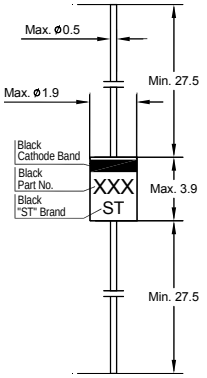
BZX79C

SILICON PLANAR ZENER DIODES



Glass Case DO-35
Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Continuous Forward Current	I_F	250	mA
Power Dissipation	P_{tot}	500 [1)]	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3 [1)]	°C/mW
Junction Temperature	T_j	- 65 to + 200	°C
Storage Temperature Range	T_S	- 65 to + 200	°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
Forward Voltage at I_F = 100 mA	V_F	1.5	V

Characteristics at T_a = 25 °C

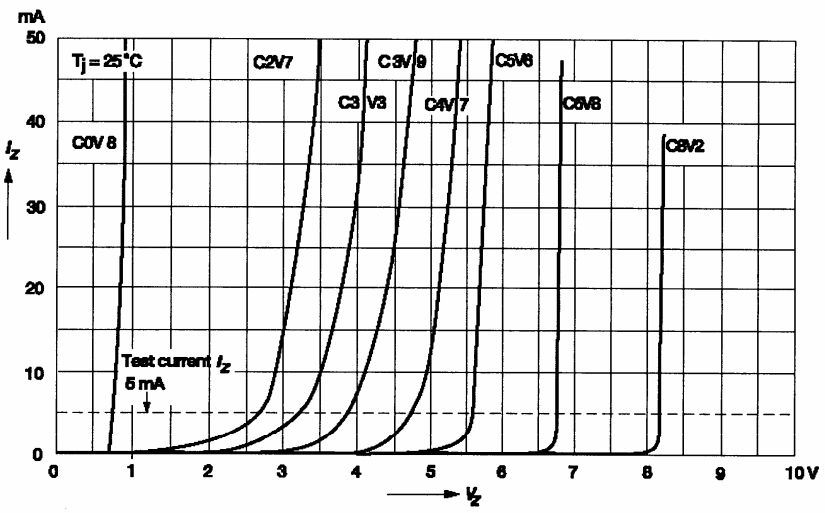
Type	Zener Voltage [1), 3)]			Maximum Zener Impedance [2)]	Maximum Leakage Current	
	Min.	Max.	I_{ZT} (mA)	Z_{ZT} (Ω) at I_{ZT}	I_R (μA)	at V_R (V)
BZX79C2V4	2.2	2.6	5	100	100	1
BZX79C2V7	2.5	2.9	5	100	75	1
BZX79C3V0	2.8	3.2	5	95	50	1
BZX79C3V3	3.1	3.5	5	95	25	1
BZX79C3V6	3.4	3.8	5	90	15	1
BZX79C3V9	3.7	4.1	5	90	10	1
BZX79C4V3	4	4.6	5	90	5	1
BZX79C4V7	4.4	5	5	80	3	2
BZX79C5V1	4.8	5.4	5	60	2	2
BZX79C5V6	5.2	6	5	40	1	2
BZX79C6V2	5.8	6.6	5	10	3	4
BZX79C6V8	6.4	7.2	5	15	2	4
BZX79C7V5	7	7.9	5	15	1	5
BZX79C8V2	7.7	8.7	5	15	0.7	5
BZX79C9V1	8.5	9.6	5	15	0.5	6
BZX79C10	9.4	10.6	5	20	0.2	7
BZX79C11	10.4	11.6	5	20	0.1	8
BZX79C12	11.4	12.7	5	25	0.1	8
BZX79C13	12.4	14.1	5	30	0.1	8
BZX79C15	13.8	15.6	5	30	0.05	10.5
BZX79C16	15.3	17.1	5	40	0.05	11.2
BZX79C18	16.8	19.1	5	45	0.05	12.6
BZX79C20	18.8	21.2	5	55	0.05	14
BZX79C22	20.8	23.3	5	55	0.05	15.4
BZX79C24	22.8	25.6	5	70	0.05	16.8
BZX79C27	25.1	28.9	2	80	0.05	18.9
BZX79C30	28	32	2	80	0.05	21
BZX79C33	31	35	2	80	0.05	23.1
BZX79C36	34	38	2	90	0.05	25.2
BZX79C39	37	41	2	130	0.05	27.3
BZX79C43	40	46	2	150	0.05	30.1
BZX79C47	44	50	2	170	0.05	32.9
BZX79C51	48	54	2	180	0.05	35.7
BZX79C56	52	60	2	200	0.05	39.2
BZX79C62	58	66	2	215	0.05	43.4
BZX79C68	64	72	2	240	0.05	47.6
BZX79C75	70	79	2	255	0.05	52.5
BZX79C82	77	87	2	280	0.1	62
BZX79C91	85	96	2	300	0.1	69
BZX79C100	94	106	1	500	0.1	76
BZX79C110	104	116	1	650	0.1	84
BZX79C120	114	127	1	800	0.1	91
BZX79C130	124	141	1	950	0.1	99
BZX79C150	138	156	1	1250	0.1	114
BZX79C160	153	171	1	1400	0.1	122
BZX79C180	168	191	1	1700	0.1	137
BZX79C200	188	212	1	2000	0.1	152

[1)] Zener voltage is measured under pulse conditions such that T_J is no more than 2 °C above T_a

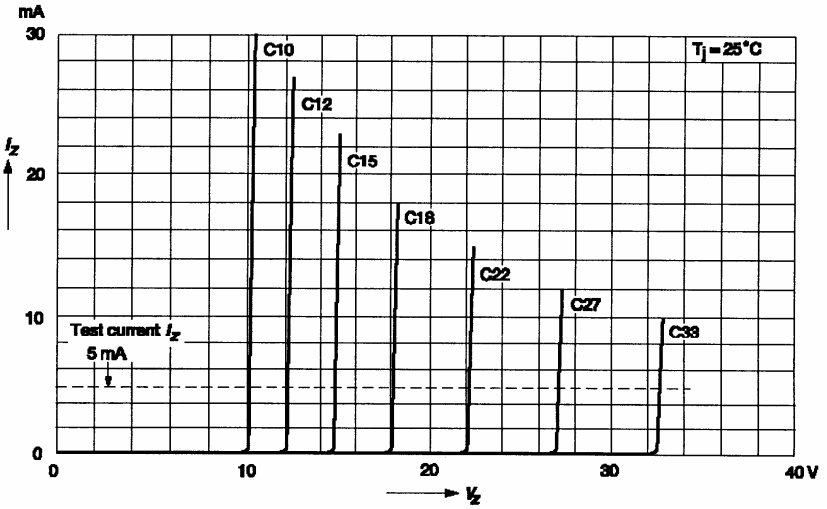
[2)] Z_{ZT} is measured by dividing the ac voltage drop across the device by the ac current applied. The specified limits are for I_Z (ac) = 0.1I_Z (dc) with the ac frequency = 1 KHz

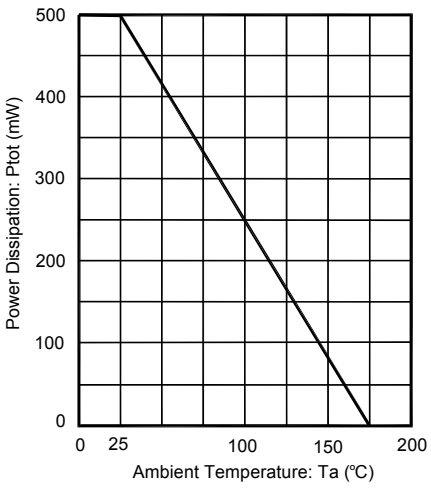
[3)] Tested with pulses tp = 20 ms.

Breakdown characteristics
at T_j = constant (pulsed)



Breakdown characteristics
at T_j = constant (pulsed)





Power Derating Curve