FAIRCHILD
SEMICONDUCTOR®

Zeners
BZX55C2V4 - BZX55C91

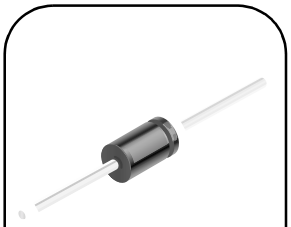
Absolute Maximum Ratings *

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation @ TL ≤ 75°C, Lead Length = 3/8”	500	mW
	Derate above 75°C	4.0	mW/°C
T_J, T_{STG}	Operating and Storage Temperature Range	-65 to +200	°C

* These ratings are limiting values above which the serviceability of the diode may be impaired.

Tolerance = 5%



DO-35 Glass case

COLOR BAND DENOTES CATHODE

Electrical Characteristics

T_A=25°C unless otherwise noted

Device	V_Z (V) @ I_Z (Note 1)		Z_Z @ I_Z (Ω)	Test Current I_Z (mA)	I_R (µA) @ V_R			I_{ZM} (mA) (Note 2)
	Min.	Max.			Ta = 25°C	Ta = 125°C	V_R (V)	
BZX55C2V4	2.28	2.56	85	5	50	100	1	155
BZX55C2V7	2.50	2.9	85	5	10	50	1	135
BZX55C3V0	2.8	3.2	85	5	4	40	1	125
BZX55C3V3	3.1	3.5	85	5	2	40	1	115
BZX55C3V6	3.4	3.8	85	5	2	40	1	105
BZX55C3V9	3.7	4.1	85	5	2	40	1	95
BZX55C4V3	4.0	4.6	75	5	1	40	1	90
BZX55C4V7	4.4	5.0	60	5	0.5	10	1	85
BZX55C5V1	4.8	5.4	35	5	0.1	2	1	80
BZX55C5V6	5.2	6.0	25	5	0.1	2	1	70
BZX55CT6V2	5.8	6.6	10	5	0.1	2	2	64
BZX55CT6V8	6.4	7.2	8	5	0.1	2	3	58
BZX55CT7V5	7.0	7.9	7	5	0.1	2	5	53
BZX55CT8V2	7.7	8.7	7	5	0.1	2	6	47
BZX55CT9V1	8.5	9.6	10	5	0.1	2	7	43
BZX55CT10	9.5	10.6	15	5	0.1	2	7.5	40
BZX55CT11	10.4	11.6	20	5	0.1	2	8.5	36
BZX55CT12	11.4	12.7	20	5	0.1	2	9	32
BZX55CT13	12.4	14.1	26	5	0.1	2	10	29
BZX55CT15	13.8	15.6	30	5	0.1	2	11	27
BZX55CT16	15.3	17.1	40	5	0.1	2	12	24
BZX55CT18	16.8	19.1	50	5	0.1	2	14	21
BZX55CT20	18.8	21.1	55	5	0.1	2	15	20
BZX55C22	20.8	23.3	55	5	0.1	2	17	18
BZX55C24	22.8	25.6	80	5	0.1	2	18	16
BZX55C27	25.1	28.9	80	5	0.1	2	20	14
BZX55C30	28.0	32.0	80	5	0.1	2	22	13
BZX55C33	31.0	35.0	80	5	0.1	2	24	12
BZX55C36	34.0	38.0	80	5	0.1	2	27	11
BZX55C39	37.0	41.0	90	2.5	0.1	5	28	10

Electrical Characteristics (Continued) T_A=25°C unless otherwise noted

Device	V_Z (V) @ I_Z (Note 1)		Z_Z @ I_Z (Ω)	Test Current I_Z (mA)	I_R (µA) @ V_R			I_{ZM} (mA) (Note 2)
	Min.	Max.			Ta = 25°C	Ta = 125°C	V_R (V)	
BZX55C43	40	46	90	5	0.1	5	32	9.2
BZX55C47	44	50	110	5	0.1	5	35	8.5
BZX55C51	48	54	125	5	0.1	10	38	7.8
BZX55C56	52	60	135	5	0.1	10	42	7.0
BZX55C62	58	66	150	5	0.1	10	47	6.4
BZX55C68	64	72	160	5	0.1	10	51	5.9
BZX55C75	70	80	170	5	0.1	10	56	5.3
BZX55C82	77	87	200	5	0.1	10	62	4.8
BZX55C91	85	96	250	1	0.1	10	69	4.3

V_F Forward Voltage = 1.3V Max @ I_F = 100mA

Notes:

1. Zener Voltage (V_Z)
   The zener voltage is measured with the device junction in the themal equilibrium at the lead temperature (T_L) at 30°C ± 1°C and 3/8" lead length.
2. Maximum Zener Current Ratings (I_{ZM})
   The maximum current handling capability on a worst case basis is limited by the actual zener voltage at the operation point and the power derating curve.

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