

ZENER DIODE

ZENER VOLTAGE RANGE: 2.0 --- 75V PEAK PULSE POWER:500mW

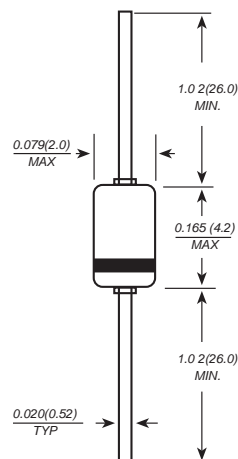
FEATURES

- Low Reverse Leakage
- Low Zener Impedance
- High Stability and High Reliability

MECHANICAL DATA

- Case:DO-35 Glass Case
- Polarity: Color band denotes cathode end
- Mounting Position: Any

DO-35(GLASS)



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified

Parameters	SYMBOLS	VALUE	UNITS
Power Dissipation	P_D	500	mW
Operating junction temperature	T_J	175	°C
Storage temperature range	T_{STG}	-55 to + 175	°C

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

TYPE	Zener Voltage			Reverse Current		Dynamic Resistance	
	$V_z(V)$		Test Condition	$I_r(\mu A)$	Test Condition	$r_d(\Omega)$	Test Condition
	Min.	Max.	$I_z(mA)$	Max.	$V_r(V)$	Max.	$I_z(mA)$
BZX55C 2V0	1.80	2.15	5.0	100	1.0	85	5.0
BZX55C 2V2	2.08	2.33	5.0	75	1.0	85	5.0
BZX55C 2V4	2.28	2.56	5.0	50	1.0	85	5.0
BZX55C 2V7	2.50	2.90	5.0	10	1.0	85	5.0
BZX55C 3V0	2.80	3.20	5.0	4	1.0	85	5.0
BZX55C 3V3	3.10	3.50	5.0	2	1.0	85	5.0
BZX55C 3V6	3.40	3.80	5.0	2	1.0	85	5.0
BZX55C 3V9	3.70	4.10	5.0	2	1.0	85	5.0
BZX55C 4V3	4.00	4.60	5.0	1	1.0	75	5.0
BZX55C 4V7	4.40	5.00	5.0	0.5	1.0	60	5.0
BZX55C 5V1	4.80	5.40	5.0	0.1	1.0	35	5.0
BZX55C 5V6	5.20	6.00	5.0	0.1	1.0	25	5.0
BZX55C 6V2	5.80	6.60	5.0	0.1	2.0	10	5.0
BZX55C 6V8	6.40	7.20	5.0	0.1	3.0	8	5.0
BZX55C 7V5	7.00	7.90	5.0	0.1	5.0	7	5.0
BZX55C 8V2	7.70	8.70	5.0	0.1	6.2	7	5.0

RATINGS AND CHARACTERISTIC CURVES

TYPE	Zener Voltage		Reverse Current		Dynamic Resistance		
	Vz(V)		Test Condition	Ir(uA)	Test Condition	rd(Ω)	Test Condition
	Min.	Max.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
BZX55C 9V1	8.50	9.60	5.0	0.1	6.8	10	5.0
BZX55C 10	9.40	10.60	5.0	0.1	7.5	15	5.0
BZX55C 11	10.40	11.60	5.0	0.1	8.2	20	5.0
BZX55C 12	11.40	12.70	5.0	0.1	9.1	20	5.0
BZX55C 13	12.40	14.10	5.0	0.1	10.0	26	5.0
BZX55C 15	13.80	15.60	5.0	0.1	11.0	30	5.0
BZX55C 16	15.30	17.10	5.0	0.1	12.0	40	5.0
BZX55C 18	16.80	19.10	5.0	0.1	13.0	50	5.0
BZX55C 20	18.80	21.20	5.0	0.1	15.0	55	5.0
BZX55C 22	20.80	23.30	5.0	0.1	16.0	55	5.0
BZX55C 24	22.80	25.60	5.0	0.1	18.0	80	5.0
BZX55C 27	25.10	28.90	5.0	0.1	20.0	80	5.0
BZX55C 30	28.00	32.00	5.0	0.1	22.0	80	5.0
BZX55C 33	31.00	35.00	5.0	0.1	24.0	80	5.0
BZX55C 36	34.00	38.00	5.0	0.1	27.0	80	5.0
BZX55C 39	37.00	41.00	2.5	0.1	30.0	90	2.5
BZX55C 43	40.00	46.00	2.5	0.1	33.0	90	2.5
BZX55C 47	44.00	50.00	2.5	0.1	36.0	110	2.5
BZX55C 51	48.00	54.00	2.5	0.1	39.0	125	2.5
BZX55C 56	52.00	60.00	2.5	0.1	43.0	135	2.5
BZX55C 62	58.00	66.00	2.5	0.1	47.0	150	2.5
BZX55C 68	64.00	72.00	2.5	0.1	51.0	200	2.5
BZX55C 75	70.00	79.00	2.5	0.1	56.0	250	2.5

Notes:

- 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.
- 4) $V_F(\text{Max})=1.20\text{V}@ I_F=100\text{mA}$

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

