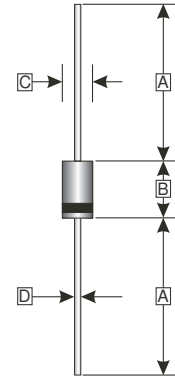


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Zener Voltage Range 2.4 to 75 Volts
- Through-Hole Device Type Mounting
- Compression Bonded Construction
- Cathode Indicated By Polarity Band
- Case: DO-35 (JEDEC)
- Hermetically Sealed Glass
- All External Surfaces Are Corrosion Resistant And Leads Are Readily Solderable

DO-35



REF.	Millimeter	
	Min.	Max.
A	25.0	29.9
B	-	4.50
C	-	2.00
D	0.46	0.56



MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Power Dissipation	P _D	500	mW
Maximum Forward Voltage @ I _F =100mA	V _F	1	V
Operating Junction and Storage Temperature Range	T _J , T _{STG}	175 , -65~175	°C

Notes:

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

ELECTRICAL RATINGS (T_A=25°C unless otherwise specified)

TYPE NUMBER ¹	ZENER VOLTAGE RANGE ²			ZENER IMPEDANCE ³			LEAKAGE CURRENT ¹	
	V _Z @I _{ZT}		I _{ZT}	Z _{ZT} @I _{ZT}	I _{ZK}	Z _{ZK} @I _{ZK}	I _R @V _R	V _R
	Min(V)	Max(V)	mA	Ω	mA	Ω	μA	V
BZX55B2V4	2.35	2.45	5	85	1	600	50	1
BZX55B2V7	2.65	2.75	5	85	1	600	10	1
BZX55B3V0	2.94	3.06	5	85	1	600	4	1
BZX55B3V3	3.23	3.37	5	85	1	600	2	1
BZX55B3V6	3.53	3.67	5	85	1	600	2	1
BZX55B3V9	3.82	3.98	5	85	1	600	2	1
BZX55B4V3	4.21	4.39	5	75	1	600	1	1
BZX55B4V7	4.61	4.79	5	60	1	600	0.5	1
BZX55B5V1	5.00	5.20	5	35	1	550	0.1	1
BZX55B5V6	5.49	5.71	5	25	1	450	0.1	1
BZX55B6V2	6.08	6.32	5	10	1	200	0.1	2

ELECTRICAL RATINGS ($T_A=25^\circ\text{C}$ unless otherwise specified)

TYPE NUMBER ¹	ZENER VOLTAGE RANGE ²			ZENER IMPEDANCE ³			LEAKAGE CURRENT ¹	
	$V_Z @ I_{ZT}$		I_{ZT}	$Z_{ZT} @ I_{ZT}$	I_{ZK}	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	V_R
	Min(V)	Max(V)	mA	Ω	mA	Ω	μA	V
BZX55B6V8	6.66	6.94	5	8	1	150	0.1	3
BZX55B7V5	7.33	7.63	5	7	1	50	0.1	5
BZX55B8V2	8.04	8.36	5	7	1	50	0.1	6.2
BZX55B9V1	8.92	9.28	5	10	1	50	0.1	6.8
BZX55B10	9.80	10.20	5	15	1	70	0.1	7.5
BZX55B11	10.78	11.22	5	20	1	70	0.1	8.2
BZX55B12	11.76	12.24	5	20	1	90	0.1	9.1
BZX55B13	12.74	13.26	5	26	1	110	0.1	10
BZX55B15	14.7	15.3	5	30	1	110	0.1	11
BZX55B16	15.68	16.32	5	40	1	170	0.1	12
BZX55B18	17.64	18.36	5	50	1	170	0.1	13
BZX55B20	19.60	20.40	5	55	1	220	0.1	15
BZX55B22	21.56	22.44	5	55	1	220	0.1	16
BZX55B24	23.52	24.48	5	80	1	220	0.1	18
BZX55B27	26.46	27.54	5	80	1	220	0.1	20
BZX55B30	29.40	30.60	5	80	1	220	0.1	22
BZX55B33	32.34	33.66	5	80	1	220	0.1	24
BZX55B36	35.28	36.72	5	80	1	220	0.1	27
BZX55B39	38.22	39.78	2.5	90	0.5	500	0.1	28
BZX55B43	42.14	43.86	2.5	90	0.5	600	0.1	32
BZX55B47	46.06	47.94	2.5	110	0.5	700	0.1	35
BZX55B51	49.98	52.02	2.5	125	0.5	700	0.1	38
BZX55B56	54.88	57.12	2.5	135	0.5	1000	0.1	42
BZX55B62	60.76	63.24	2.5	150	0.5	1000	0.1	47
BZX55B68	66.64	69.36	2.5	160	0.5	1000	0.1	51
BZX55B75	73.50	76.50	2.5	170	0.5	1000	0.1	56

V_F Forward Voltage=1.0V Maximum @ $I_F=100\text{mA}$ for all types.

Notes:

1. TOLERANCE AND VOLTAGE DESIGNATION

The type numbers listed have zener voltage as shown.

2. ZENER VOLTAGE (V_Z) MEASUREMENT

The zener voltage is measured under pulse conditions such that T_J is no more than 2°C above T_A .

3. ZENER IMPEDANCE (Z_Z) DERIVATION

Zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an RMS value equal to 10% of the dc zener current (I_{ZT}) is superimposed to I_{ZT} .

RATINGS AND CHARACTERISTIC CURVES

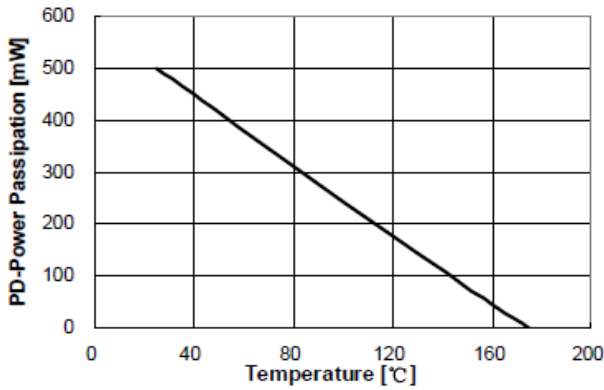


Figure 1. Power Dissipation vs Ambient Temperature
Valid provided leads at a distance of 0.8mm from case are kept at ambient temperature

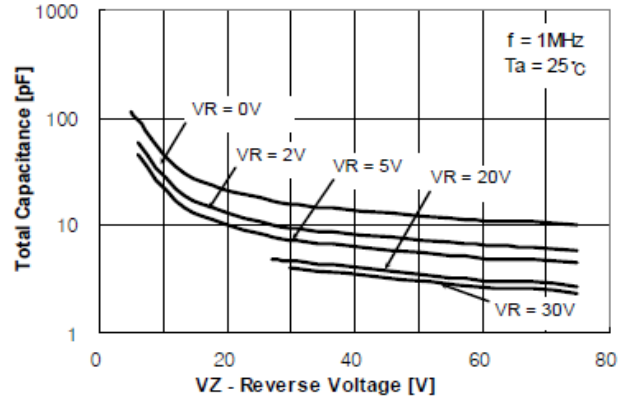


Figure 2. Total Capacitance

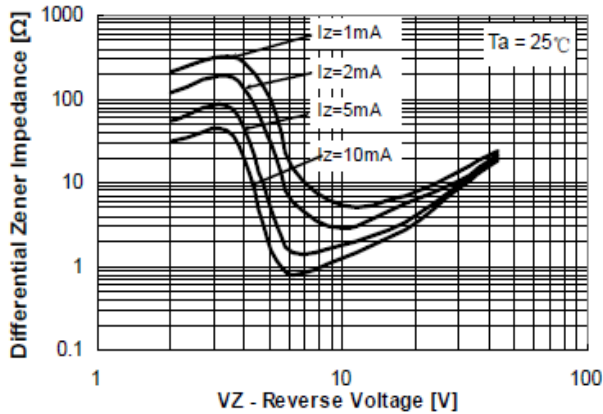


Figure 3. Differential Impedance vs. Zener Voltage

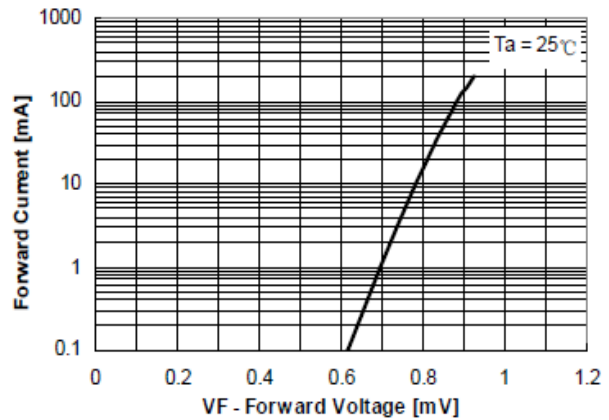


Figure 4. Forward Current vs. Forward Voltage

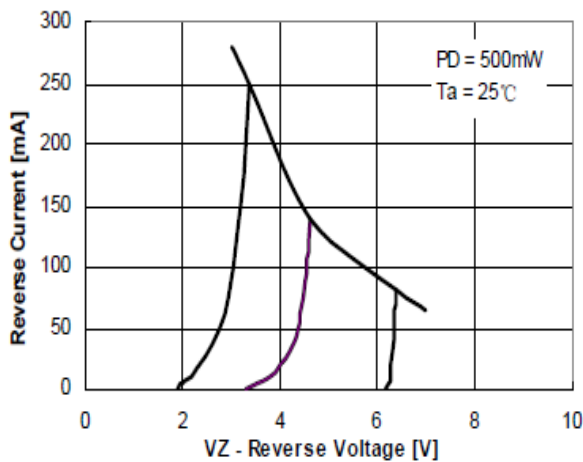


Figure 5. Reverse Current vs. Reverse Voltage

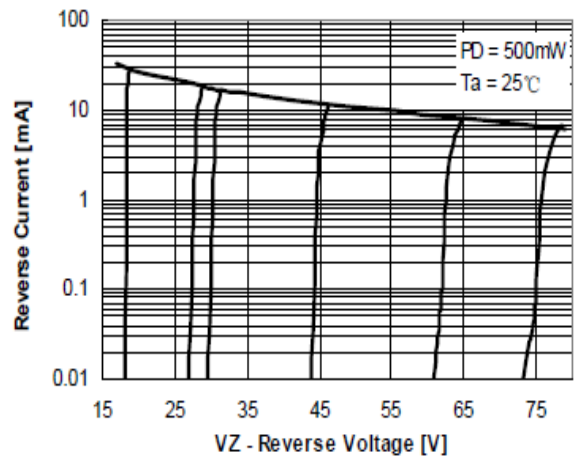


Figure 6. Reverse Current vs. Reverse Voltage