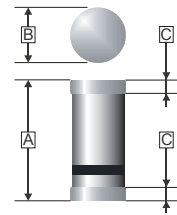


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Zener Voltage Range 2.4 to 75 Volts
- Mini-MELF Package
- Surface Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Terminals Are Readily Solderable
- Matte Tin (Sn) Terminal Finish
- Color band Indicates Negative Polarity

**SOD-80 (Mini-MELF)**



REF.	Millimeter	
	Min.	Max.
A	3.30	3.70
B	1.40	1.60
C	0.28	0.50

## PACKAGING INFORMATION

Weight: 0.0307 grams (Approximate)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNITS
Power Dissipation	$P_D$	500	mW
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	+175, -65~175	°C

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

**ELECTRICAL RATINGS** (Rating 25°C ambient temperature unless otherwise specified)

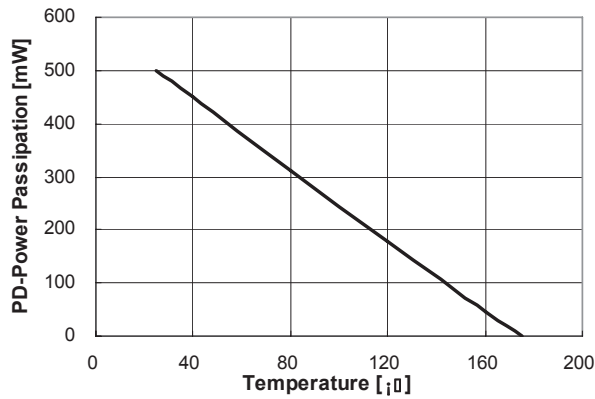
Device Type	V <sub>Z</sub> @ I <sub>ZT</sub> (Volts)		I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> @ I <sub>ZT</sub> (Ω) Max	I <sub>ZK</sub> (mA)	Z <sub>ZK</sub> @ I <sub>ZK</sub> (Ω) Max	I <sub>R</sub> @ V <sub>R</sub> (μA) Max	V <sub>R</sub> (Volts)
	V <sub>Z</sub> (Min)	V <sub>Z</sub> (Max)						
BZV55B 2V4	2.35	2.45	5.0	85	1.0	600	50.0	1.0
BZV55B 2V7	2.65	2.75	5.0	85	1.0	600	10.0	1.0
BZV55B 3V0	2.94	3.06	5.0	85	1.0	600	4.0	1.0
BZV55B 3V3	3.23	3.37	5.0	85	1.0	600	2.0	1.0
BZV55B 3V6	3.53	3.67	5.0	85	1.0	600	2.0	1.0
BZV55B 3V9	3.82	3.98	5.0	85	1.0	600	2.0	1.0
BZV55B 4V3	4.21	4.39	5.0	75	1.0	600	1.0	1.0
BZV55B 4V7	4.61	4.79	5.0	60	1.0	600	0.5	1.0
BZV55B 5V1	5.00	5.20	5.0	35	1.0	550	0.1	1.0
BZV55B 5V6	5.49	5.71	5.0	25	1.0	450	0.1	1.0
BZV55B 6V2	6.08	6.32	5.0	10	1.0	200	0.1	2.0
BZV55B 6V8	6.66	6.94	5.0	8	1.0	150	0.1	3.0
BZV55B 7V5	7.33	7.63	5.0	7	1.0	50	0.1	5.0
BZV55B 8V2	8.04	8.36	5.0	7	1.0	50	0.1	6.2
BZV55B 9V1	8.92	9.28	5.0	10	1.0	50	0.1	6.8
BZV55B 10	9.80	10.20	5.0	15	1.0	70	0.1	7.5
BZV55B 11	10.78	11.22	5.0	20	1.0	70	0.1	8.2
BZV55B 12	11.76	12.24	5.0	20	1.0	90	0.1	9.1
BZV55B 13	12.74	13.26	5.0	26	1.0	110	0.1	10.0
BZV55B 15	14.70	15.30	5.0	30	1.0	110	0.1	11.0
BZV55B 16	15.68	16.32	5.0	40	1.0	170	0.1	12.0
BZV55B 18	17.64	18.36	5.0	50	1.0	170	0.1	13.0
BZV55B 20	19.60	20.40	5.0	55	1.0	220	0.1	15.0
BZV55B 22	21.56	22.44	5.0	55	1.0	220	0.1	16.0
BZV55B 24	23.52	24.48	5.0	80	1.0	220	0.1	18.0
BZV55B 27	26.46	27.54	5.0	80	1.0	220	0.1	20.0
BZV55B 30	29.40	30.60	5.0	80	1.0	220	0.1	22.0
BZV55B 33	32.34	33.66	5.0	80	1.0	220	0.1	24.0
BZV55B 36	35.28	36.72	5.0	80	1.0	220	0.1	27.0
BZV55B 39	38.22	39.78	2.5	90	0.5	500	0.1	28.0
BZV55B 43	42.14	43.86	2.5	90	0.5	600	0.1	32.0
BZV55B 47	46.06	47.94	2.5	110	0.5	700	0.1	35.0
BZV55B 51	49.98	52.02	2.5	125	0.5	700	0.1	38.0
BZV55B 56	54.88	57.12	2.5	135	0.5	1000	0.1	42.0
BZV55B 62	60.76	63.24	2.5	150	0.5	1000	0.1	47.0
BZV55B 68	66.64	69.36	2.5	160	0.5	1000	0.1	51.0
BZV55B 75	73.50	76.50	2.5	170	0.5	1000	0.1	56.0

V<sub>F</sub> Forward Voltage = 1.0 V Maximum @ I<sub>F</sub> = 100 mA for all types

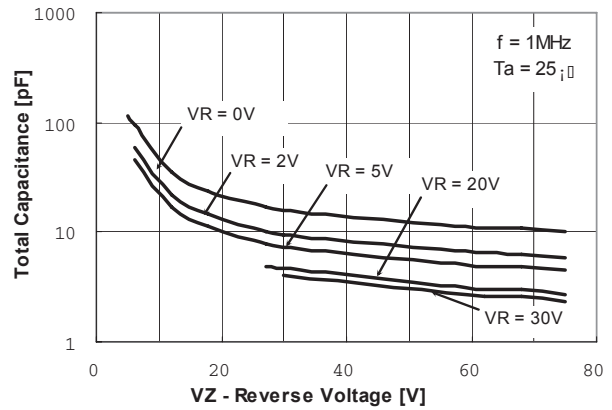
**Notes:**

1. The type numbers listed have zener voltage min/max limits as shown.
2. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest SeCoS representative.
3. The 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<sub>ZT</sub> or I<sub>ZK</sub>) is superimposed to I<sub>ZT</sub> or I<sub>ZK</sub>

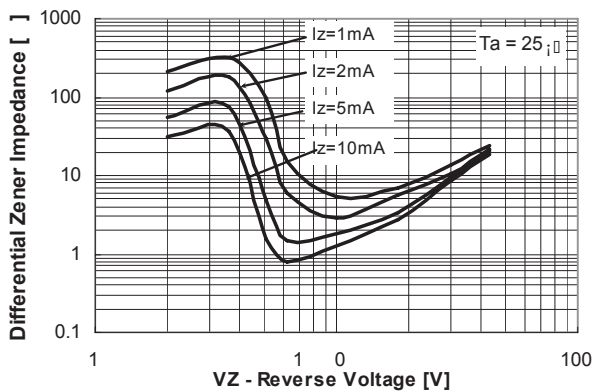
**RATINGS AND CHARACTERISTIC CURVES**



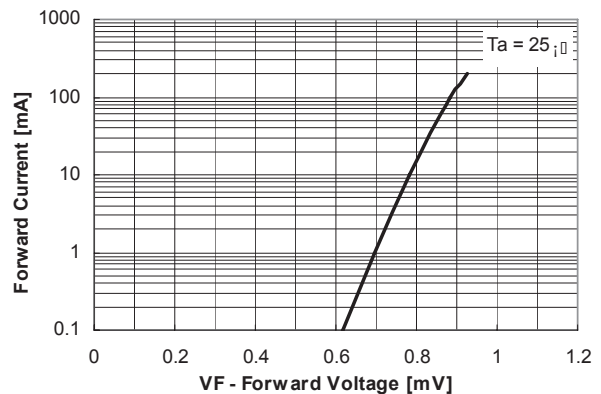
**Figure 1. Power Dissipation vs Ambient Temperature**  
Valid provided leads at a distance of 0.8mm from case are kept at ambient temperature



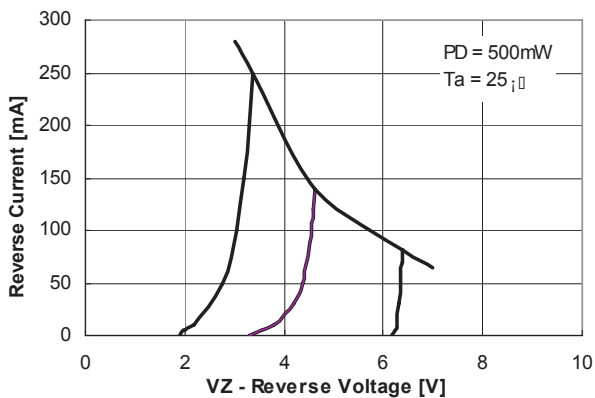
**Figure 2. Total Capacitance**



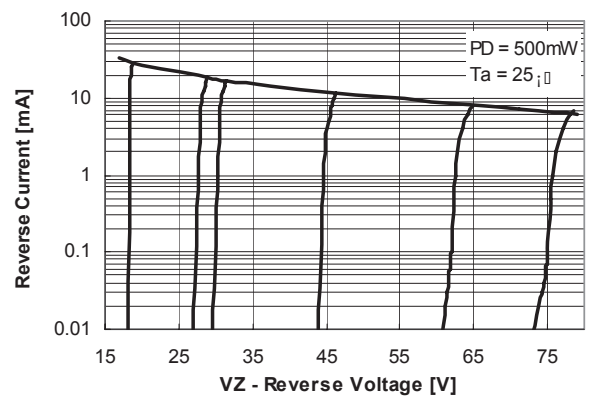
**Figure 3. Differential Impedance vs. Zener Voltage**



**Figure 4. Forward Current vs. Forward Voltage**



**Figure 5. Reverse Current vs. Reverse Voltage**



**Figure 6. Reverse Current vs. Reverse Voltage**