

**ELECTRICAL SPECIFICATIONS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

PART NUMBER	ZENER VOLTAGE			TEST CURRENT	REGULAR IMPEDANCE		TEST CURRENT	LEAKAGE CURRENT	
	$V_Z @ I_{ZT}$			$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R @ V_R$	
	V			mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V
	Min.	Nom.	Max.		Max.	Max.		Max.	
BZV55B2V4	2.35	2.4	2.45	5	85	600	1.0	50	1.0
BZV55B2V7	2.65	2.7	2.75	5	85	600	1.0	10	1.0
BZV55B3V0	2.94	3.0	3.06	5	85	600	1.0	4	1.0
BZV55B3V3	3.23	3.3	3.37	5	85	600	1.0	2	1.0
BZV55B3V6	3.53	3.6	3.67	5	85	600	1.0	2	1.0
BZV55B3V9	3.82	3.9	3.98	5	85	600	1.0	2	1.0
BZV55B4V3	4.21	4.3	4.39	5	75	600	1.0	1	1.0
BZV55B4V7	4.61	4.7	4.79	5	60	600	1.0	0.5	1.0
BZV55B5V1	5.00	5.1	5.20	5	35	550	1.0	0.1	1.0
BZV55B5V6	5.49	5.6	5.71	5	25	450	1.0	0.1	1.0
BZV55B6V2	6.08	6.2	6.32	5	10	200	1.0	0.1	2.0
BZV55B6V8	6.66	6.8	6.94	5	8	150	1.0	0.1	3.0
BZV55B7V5	7.35	7.5	7.65	5	7	50	1.0	0.1	5.0
BZV55B8V2	8.04	8.2	8.36	5	7	50	1.0	0.1	6.2
BZV55B9V1	8.92	9.1	9.28	5	10	50	1.0	0.1	6.8
BZV55B10	9.80	10	10.20	5	15	70	1.0	0.1	7.5
BZV55B11	10.78	11	11.22	5	20	70	1.0	0.1	8.2
BZV55B12	11.76	12	12.24	5	20	90	1.0	0.1	9.1
BZV55B13	12.74	13	13.26	5	26	110	1.0	0.1	10
BZV55B15	14.70	15	15.30	5	30	110	1.0	0.1	11
BZV55B16	15.68	16	16.32	5	40	170	1.0	0.1	12
BZV55B18	17.64	18	18.36	5	50	170	1.0	0.1	13
BZV55B20	19.60	20	20.40	5	55	220	1.0	0.1	15
BZV55B22	21.56	22	22.44	5	55	220	1.0	0.1	16
BZV55B24	23.52	24	24.48	5	80	220	1.0	0.1	18
BZV55B27	26.46	27	27.54	5	80	220	1.0	0.1	20
BZV55B30	29.40	30	30.60	5	80	220	1.0	0.1	22
BZV55B33	32.34	33	33.66	5	80	220	1.0	0.1	24
BZV55B36	35.28	36	36.72	5	80	220	1.0	0.1	27
BZV55B39	38.22	39	39.78	2.5	90	500	0.5	0.1	28
BZV55B43	42.14	43	43.86	2.5	90	600	0.5	0.1	32
BZV55B47	46.06	47	47.94	2.5	110	700	0.5	0.1	35
BZV55B51	49.98	51	52.02	2.5	125	700	0.5	0.1	38
BZV55B56	54.88	56	57.12	2.5	135	1000	0.5	0.1	42
BZV55B62	60.76	62	63.24	2.5	150	1000	0.5	0.1	47
BZV55B68	66.64	68	69.36	2.5	160	1000	0.5	0.1	51
BZV55B75	73.50	75	76.50	2.5	170	1000	0.5	0.1	56

**Notes:**

1. The zener voltage ( $V_Z$ ) is tested under pulse condition of 30ms.
2. The device numbers listed have a standard tolerance on the nominal zener voltage of  $\pm 2\%$ .
3. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest Taiwan Semiconductor representative.
4. 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 ( $I_{ZT}$  or  $I_{ZK}$ ) is superimposed to  $I_{ZT}$  or  $I_{ZK}$ .

<b>ORDERING INFORMATION</b>		
<b>PART NO.</b> (Note 1)	<b>PACKAGE</b>	<b>PACKING</b>
BZV55Bxxx L0	MINI MELF	10K / 13" Reel
BZV55Bxxx L0G	MINI MELF	10K / 13" Reel
BZV55Bxxx L1	MINI MELF	2.5K / 7" Reel
BZV55Bxxx L1G	MINI MELF	2.5K / 7" Reel

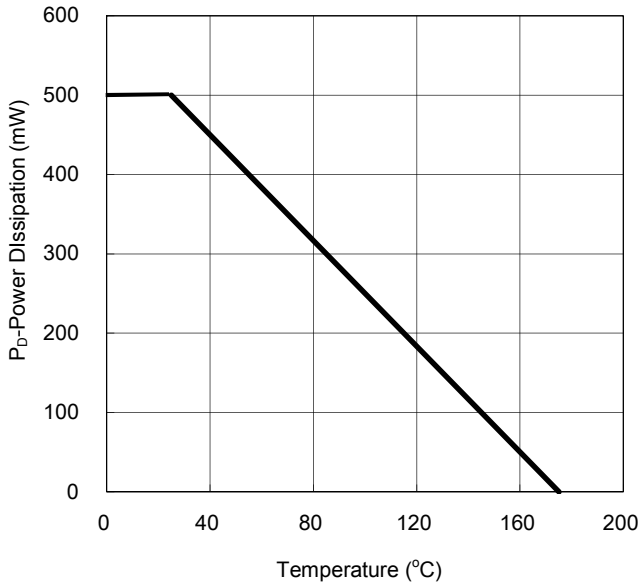
**Notes:**

1. "xxx" defines voltage from 2.4V (BZV55B2V4) to 75V (BZV55B75)

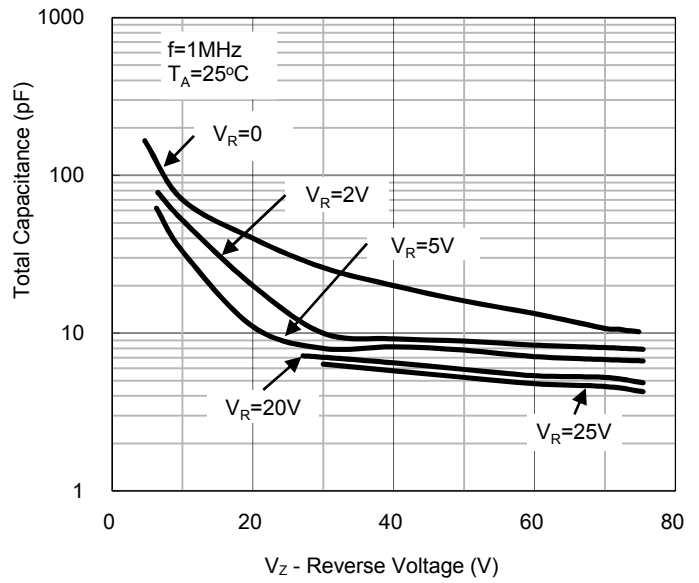
**CHARACTERISTICS CURVES**

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

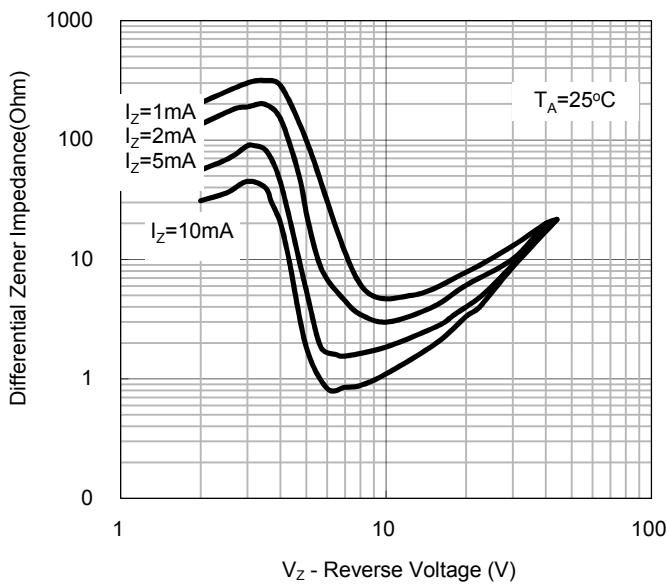
**Fig. 1 Power Dissipation VS. Ambient Temperature**



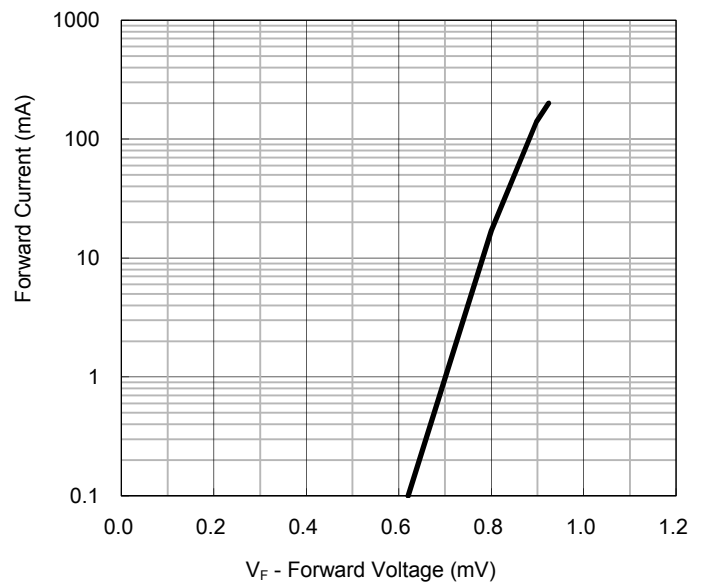
**Fig. 2 Total Capacitance**



**Fig. 3 Differential Impedance VS. Zener Voltage**

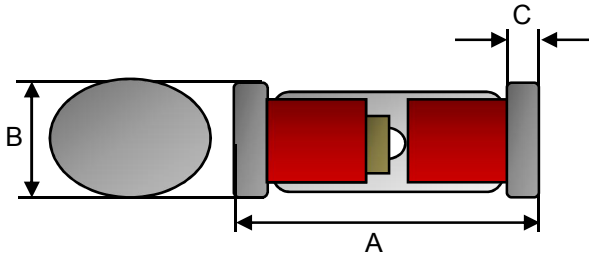


**Fig. 4 Forward Current VS. Forward Voltage**



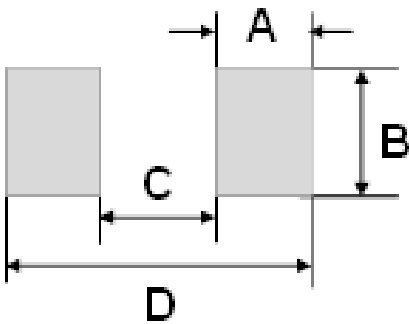
**PACKAGE OUTLINE DIMENSION**

Mini-MELF



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	3.30	3.70	0.130	0.146
B	1.40	1.60	0.055	0.063
C	0.20	0.50	0.008	0.020

**SUGGEST PAD LAYOUT**



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
A	1.25	0.049
B	2.00	0.079
C	2.50	0.098
D	5.00	0.197

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[BZV55B18](#) [BZV55B20](#) [BZV55B22](#) [BZV55B24](#) [BZV55B27](#) [BZV55B2V4](#) [BZV55B2V7](#) [BZV55B30](#) [BZV55B33](#)  
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[BZV55B9V1](#) [BZV55B22 L0G](#) [BZV55B9V1 L1G](#) [BZV55B3V9 L1G](#) [BZV55B62 L0](#) [BZV55B30 L0](#) [BZV55B16 L1G](#)  
[BZV55B75 L0](#) [BZV55B3V9 L0G](#) [BZV55B5V6 L1G](#) [BZV55B2V7 L1G](#) [BZV55B3V3 L0G](#) [BZV55B18 L0G](#) [BZV55B24](#)  
[L1G](#) [BZV55B10 L0G](#) [BZV55B24 L0G](#) [BZV55B51 L1G](#) [BZV55B47 L0G](#) [BZV55B3V0 L0](#) [BZV55B13 L1G](#)  
[BZV55B4V7 L0G](#) [BZV55B36 L0G](#) [BZV55B3V0 L1G](#) [BZV55B5V1 L1G](#) [BZV55B3V3 L1G](#) [BZV55B15 L0](#) [BZV55B15](#)  
[L1G](#) [BZV55B43 L1G](#) [BZV55B62 L0G](#) [BZV55B7V5 L0](#) [BZV55B8V2 L0G](#) [BZV55B68 L0G](#) [BZV55B6V2 L1G](#)  
[BZV55B15 L0G](#) [BZV55B10 L0](#) [BZV55B27 L0G](#) [BZV55B6V2 L0G](#) [BZV55B4V3 L0G](#) [BZV55B3V6 L1G](#) [BZV55B39](#)  
[L1G](#) [BZV55B12 L0](#) [BZV55B10 L1G](#) [BZV55B2V4 L0](#) [BZV55B5V1 L0](#) [BZV55B33 L1G](#) [BZV55B30 L0G](#) [BZV55B39](#)  
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[BZV55B68 L1](#) [BZV55B7V5 L1G](#) [BZV55B68 L1G](#) [BZV55B51 L0G](#) [BZV55B75 L0G](#) [BZV55B6V8 L1G](#) [BZV55B5V6 L0](#)  
[BZV55B3V9 L0](#) [BZV55B27 L1G](#) [BZV55B12 L1G](#) [BZV55B8V2 L0](#)