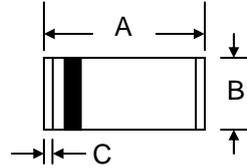


Features

- Planar Die Construction
- 500mW Power Dissipation
- 2.4V – 75V Nominal Zener Voltage
- 5% Standard Vz Tolerance
- Ideally Suited for Automated Assembly
- For Use in Voltage Stabilizer or Reference



Mechanical Data

- Case: MiniMELF, Molded Glass
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.03 grams
- Marking: Cathode Band Only
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 5**

MiniMELF		
Dim	Min	Max
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation at $T_A = 25^\circ\text{C}$ (Note 1)	P_D	500	mW
Forward Voltage @ $I_F = 200\text{mA}$	V_F	1.5	V
Thermal Resistance Junction to Ambient (Note 1)	R_{JA}	0.3	$^\circ\text{C}/\text{mW}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +175	$^\circ\text{C}$

Note: 1. Mounted on ceramic substrate with minimum recommended pad layout.

ZMM55C2V4 – ZMM55C75

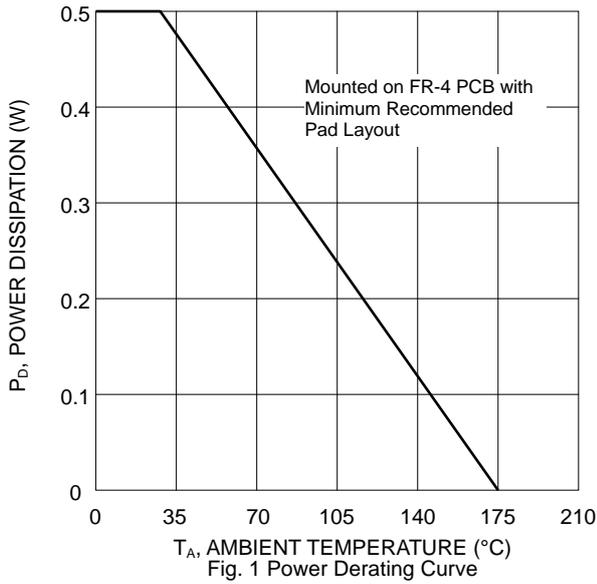


Fig. 1 Power Derating Curve

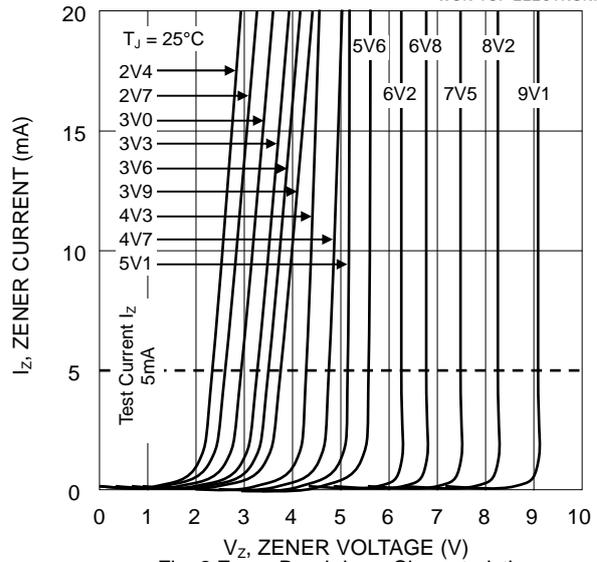


Fig. 2 Zener Breakdown Characteristics

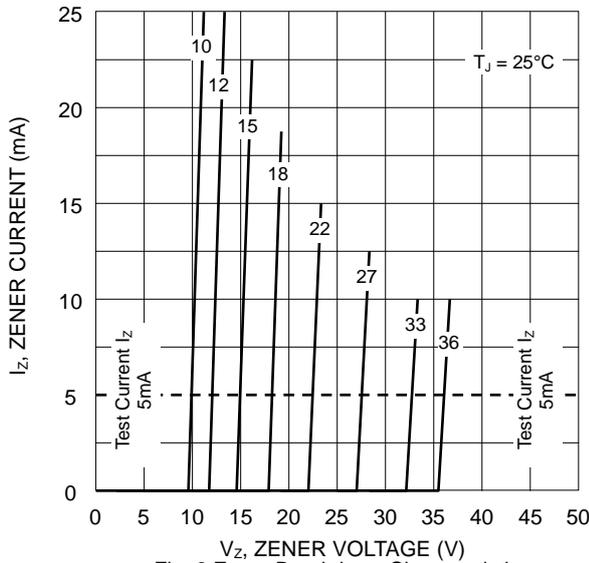


Fig. 3 Zener Breakdown Characteristics

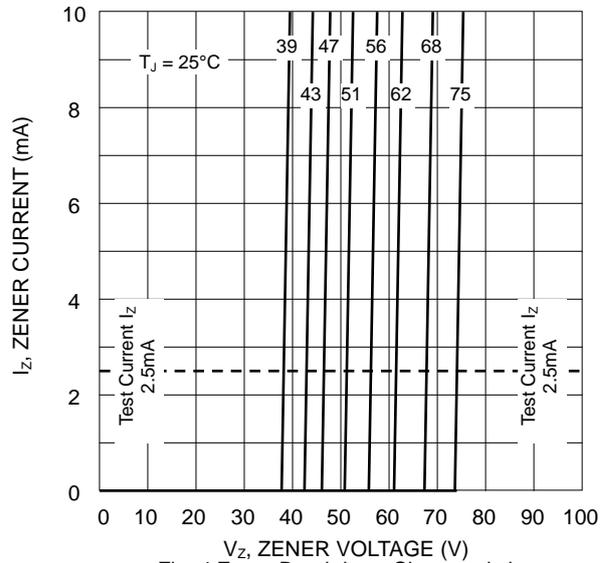


Fig. 4 Zener Breakdown Characteristics

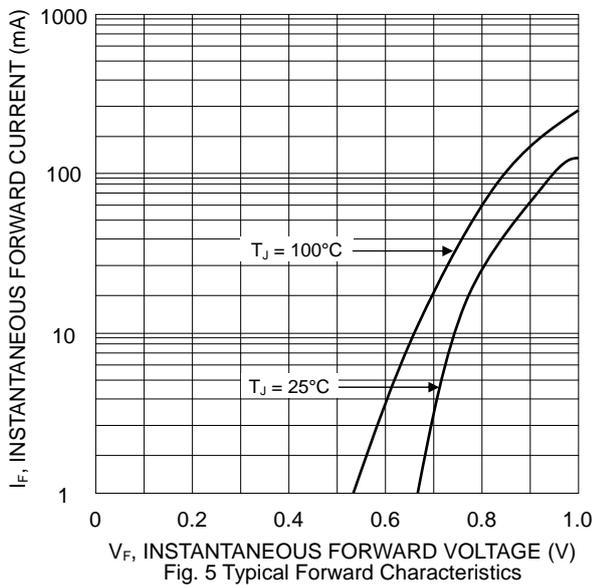


Fig. 5 Typical Forward Characteristics

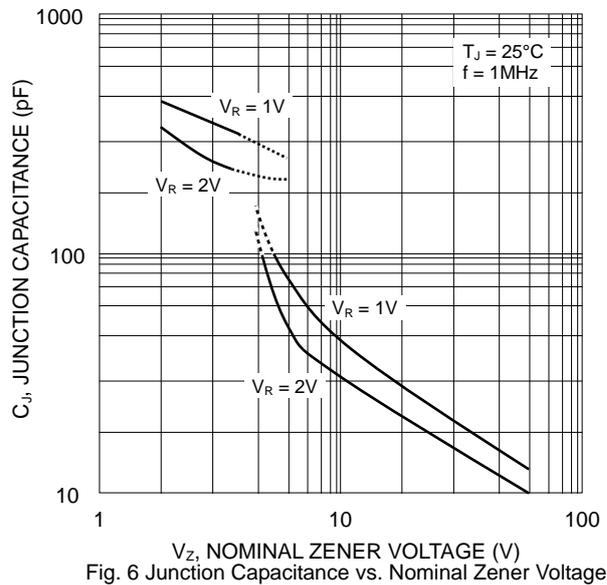


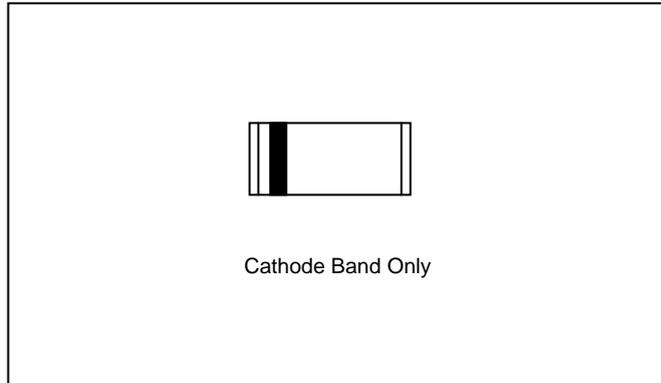
Fig. 6 Junction Capacitance vs. Nominal Zener Voltage

Electrical Characteristics (@T_A=25°C unless otherwise specified) Table 1

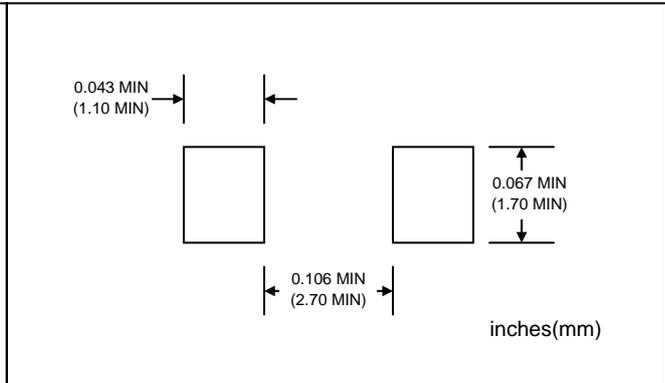
Type Number (Note 1)	Zener Voltage Range (Note 2)			Typical Zener Impedance (Note 3)				Max Reverse Leakage Current		Temp. Coefficient of Zener Voltage @ I _{ZT} (%/K)	
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R	@ V _R	Min	Max
	Nom (V)	Min (V)	Max (V)	()	(mA)	()	(mA)	(μA)	(V)		
ZMM55C2V4	2.4	2.28	2.56	85	5.0	600	1.0	50	1.0	-0.09	-0.06
ZMM55C2V7	2.7	2.5	2.9	85	5.0	600	1.0	10	1.0	-0.09	-0.06
ZMM55C3V0	3.0	2.8	3.2	90	5.0	600	1.0	4.0	1.0	-0.08	-0.05
ZMM55C3V3	3.3	3.1	3.5	90	5.0	600	1.0	2.0	1.0	-0.08	-0.05
ZMM55C3V6	3.6	3.4	3.8	90	5.0	600	1.0	2.0	1.0	-0.08	-0.05
ZMM55C3V9	3.9	3.7	4.1	90	5.0	600	1.0	2.0	1.0	-0.08	-0.05
ZMM55C4V3	4.3	4.0	4.6	90	5.0	600	1.0	1.0	1.0	-0.06	-0.03
ZMM55C4V7	4.7	4.4	5.0	80	5.0	600	1.0	0.5	1.0	-0.05	+0.02
ZMM55C5V1	5.1	4.8	5.4	60	5.0	550	1.0	0.1	1.0	-0.02	+0.02
ZMM55C5V6	5.6	5.2	6.0	40	5.0	450	1.0	0.1	1.0	-0.05	+0.05
ZMM55C6V2	6.2	5.8	6.6	10	5.0	200	1.0	0.1	2.0	+0.03	+0.06
ZMM55C6V8	6.8	6.4	7.2	8.0	5.0	150	1.0	0.1	3.0	+0.03	+0.07
ZMM55C7V5	7.5	7.0	7.9	7.0	5.0	50	1.0	0.1	5.0	+0.03	+0.07
ZMM55C8V2	8.2	7.7	8.7	7.0	5.0	50	1.0	0.1	6.2	+0.03	+0.08
ZMM55C9V1	9.1	8.5	9.6	10	5.0	50	1.0	0.1	6.8	+0.03	+0.09
ZMM55C10	10	9.4	10.6	15	5.0	70	1.0	0.1	7.5	+0.03	+0.10
ZMM55C11	11	10.4	11.6	20	5.0	70	1.0	0.1	8.2	+0.03	+0.11
ZMM55C12	12	11.4	12.7	20	5.0	90	1.0	0.1	9.1	+0.03	+0.11
ZMM55C13	13	12.4	14.1	26	5.0	110	1.0	0.1	10	+0.03	+0.11
ZMM55C15	15	13.8	15.6	30	5.0	110	1.0	0.1	11	+0.03	+0.11
ZMM55C16	16	15.3	17.1	40	5.0	170	1.0	0.1	12	+0.03	+0.11
ZMM55C18	18	16.8	19.1	50	5.0	170	1.0	0.1	13	+0.03	+0.11
ZMM55C20	20	18.8	21.2	55	5.0	220	1.0	0.1	15	+0.03	+0.11
ZMM55C22	22	20.8	23.3	55	5.0	220	1.0	0.1	16	+0.04	+0.12
ZMM55C24	24	22.8	25.6	80	5.0	220	1.0	0.1	18	+0.04	+0.12
ZMM55C27	27	25.1	28.9	80	5.0	220	1.0	0.1	20	+0.04	+0.12
ZMM55C30	30	28.0	32.0	80	5.0	220	1.0	0.1	22	+0.04	+0.12
ZMM55C33	33	31.0	35.0	80	5.0	220	1.0	0.1	24	+0.04	+0.12
ZMM55C36	36	34.0	38.0	80	5.0	220	1.0	0.1	27	+0.04	+0.12
ZMM55C39	39	37.0	41.0	90	2.5	500	0.5	0.1	30	+0.04	+0.12
ZMM55C43	43	40.0	46.0	90	2.5	600	0.5	0.1	33	+0.04	+0.12
ZMM55C47	47	44.0	50.0	110	2.5	700	0.5	0.1	36	+0.04	+0.12
ZMM55C51	51	48.0	54.0	125	2.5	700	0.5	0.1	39	+0.04	+0.12
ZMM55C56	56	52.0	60.0	135	2.5	1000	0.5	0.1	43	+0.04	+0.12
ZMM55C62	62	58.0	66.0	150	2.5	1000	0.5	0.1	47	+0.04	+0.12
ZMM55C68	68	64.0	72.0	200	2.5	1000	0.5	0.1	51	+0.04	+0.12
ZMM55C75	75	70.0	79.0	250	2.5	1500	0.5	0.1	56	+0.04	+0.12

Note: 1. Type numbers listed have standard tolerance on the nominal zener voltage of ±5%.
 2. Measured with device junction in thermal equilibrium.
 3. f = 1KHz

MARKING INFORMATION

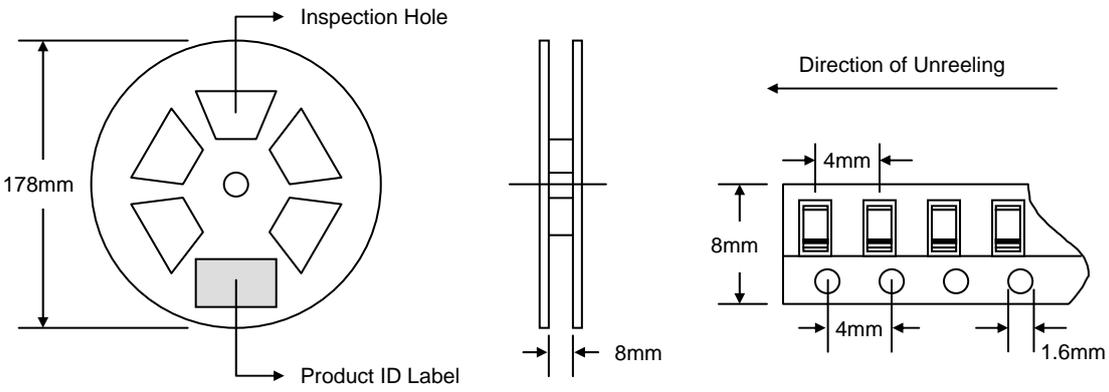


RECOMMENDED FOOTPRINT



PACKAGING INFORMATION

TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	2,500	185 x 120 x 185	25,000	400 x 273 x 415	200,000	13.5

Note: 1. Anti-static plastic reel, white or water clear or blue color. Inspection hole might be varied in different alignment.
2. Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
ZMM55Cxx-T1	MiniMELF	2500/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, ZMM55C2V4-T1-LF.**

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