



ZMM55Cxxx SERIES



500 mW Sealed Glass Zener Voltage Regulators



MINI MELF

Features

- Zener Voltage Range 2.0 to 75 Volts
- Surface Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Terminals Are Readily Solderable
- RoHS Compliant
- Matte Tin (Sn) Terminal Finish
- Color band Indicates Negative Polarity

Ordering Information

Part No.	Package	Packing
ZMM55Cxxx SERIES	MINI MELF	2500 / Tape & Reel

Maximum Ratings and Electrical Characteristics (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Power Dissipation	P_{TOT}	500	mW
Junction Temperature	T_J	175	°C
Storage Temperature Range	T_S	-65 to +175	°C
Forward Voltage at $I_F = 100mA$	VF	1	V

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



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500 mWatt Surface Mount Zener Diodes / LL-34

Part Number	Nominal Zener Voltage				Maximum Zener Impedance				Maximum Reverse	
	V _Z @ I _{ZT}			I _{ZT}	Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R	
	Nom. V	Min. V	Max. V	mA	Ω	mA	Ω	mA	uA	V
ZMM55C2V0	2.0	1.88	2.11	5.0	100	5.0	600	1.0	50.0	1.0
ZMM55C2V2	2.2	2.08	2.33	5.0	100	5.0	600	1.0	50.0	1.0
ZMM55C2V4	2.4	2.28	2.56	5.0	85	5.0	600	1.0	50.0	1.0
ZMM55C2V7	2.7	2.50	2.90	5.0	85	5.0	600	1.0	10.0	1.0
ZMM55C3V0	3.0	2.80	3.20	5.0	85	5.0	600	1.0	4.0	1.0
ZMM55C3V3	3.3	3.10	3.50	5.0	85	5.0	600	1.0	2.0	1.0
ZMM55C3V6	3.6	3.40	3.80	5.0	85	5.0	600	1.0	2.0	1.0
ZMM55C3V9	3.9	3.70	4.10	5.0	85	5.0	600	1.0	2.0	1.0
ZMM55C4V3	4.3	4.00	4.60	5.0	75	5.0	600	1.0	1.0	1.0
ZMM55C4V7	4.7	4.40	5.00	5.0	60	5.0	600	1.0	0.5	1.0
ZMM55C5V1	5.1	4.80	5.40	5.0	35	5.0	550	1.0	0.1	1.0
ZMM55C5V6	5.6	5.20	6.00	5.0	25	5.0	450	1.0	0.1	1.0
ZMM55C6V2	6.2	5.80	6.60	5.0	10	5.0	200	1.0	0.1	2.0
ZMM55C6V8	6.8	6.40	7.20	5.0	8	5.0	150	1.0	0.1	3.0
ZMM55C7V5	7.5	7.00	7.90	5.0	7	5.0	50	1.0	0.1	5.0
ZMM55C8V2	8.2	7.70	8.70	5.0	7	5.0	50	1.0	0.1	6.2
ZMM55C9V1	9.1	8.50	9.60	5.0	10	5.0	50	1.0	0.1	6.8
ZMM55C10	10.0	9.40	10.60	5.0	15	5.0	70	1.0	0.1	7.5
ZMM55C11	11.0	10.40	11.60	5.0	20	5.0	70	1.0	0.1	8.2
ZMM55C12	12.0	11.40	12.70	5.0	20	5.0	90	1.0	0.1	9.1
ZMM55C13	13.0	12.40	14.10	5.0	26	5.0	110	1.0	0.1	10
ZMM55C15	15.0	13.80	15.60	5.0	30	5.0	110	1.0	0.1	11
ZMM55C16	16.0	15.30	17.10	5.0	40	5.0	170	1.0	0.1	12
ZMM55C18	18.0	16.80	19.10	5.0	50	5.0	170	1.0	0.1	13
ZMM55C20	20.0	18.80	21.20	5.0	55	5.0	220	1.0	0.1	15
ZMM55C22	22.0	20.80	23.30	5.0	55	5.0	220	1.0	0.1	16
ZMM55C24	24.0	22.80	25.60	5.0	80	5.0	220	1.0	0.1	18
ZMM55C27	27.0	25.10	28.90	5.0	80	5.0	220	1.0	0.1	20
ZMM55C30	30.0	28.00	32.00	5.0	80	5.0	220	1.0	0.1	22
ZMM55C33	33.0	31.00	35.00	5.0	80	5.0	220	1.0	0.1	24
ZMM55C36	36.0	34.00	38.00	5.0	80	5.0	220	1.0	0.1	27
ZMM55C39	39.0	37.00	41.00	2.5	90	2.5	500	1.0	0.1	28
ZMM55C43	43.0	40.00	46.00	2.5	90	2.5	600	1.0	0.1	32
ZMM55C47	47.0	44.00	50.00	2.5	110	2.5	700	1.0	0.1	35
ZMM55C51	51.0	48.00	54.00	2.5	125	2.5	700	0.5	0.1	38
ZMM55C56	56.0	52.00	60.00	2.5	135	2.5	1000	0.5	0.1	42
ZMM55C62	62.0	58.00	66.00	2.5	150	2.5	1000	0.5	0.1	47
ZMM55C68	68.0	64.00	72.00	2.5	200	2.5	1000	0.5	0.1	51
ZMM55C75	75.0	70.00	80.00	2.5	250	2.5	1500	0.5	0.1	56

Notes:

1. The type numbers listed have zener voltage min/max limits as shown.

2. 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}.



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Rating and Characteristics Curvers

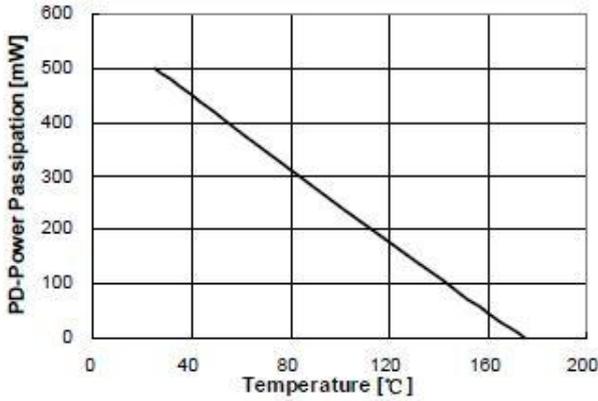


Figure 1. Power Dissipation vs Ambient Temperature
Valid provided leads at a distance of 0.8mm from case are kept at ambient temperature

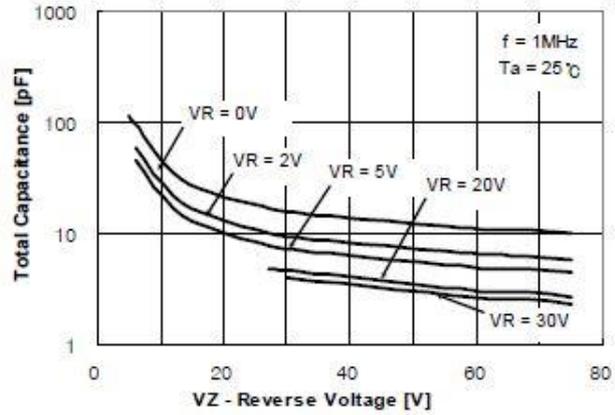


Figure 2. Total Capacitance

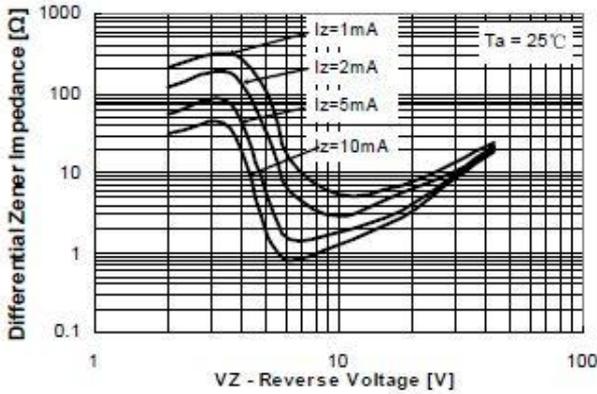


Figure 3. Differential Impedance vs. Zener Voltage

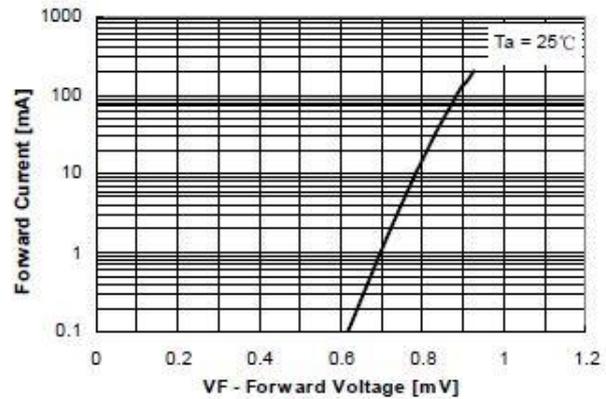


Figure 4. Forward Current vs. Forward Voltage

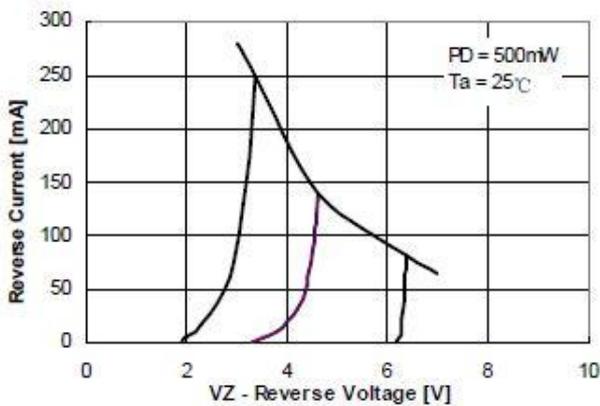


Figure 5. Reverse Current vs. Reverse Voltage

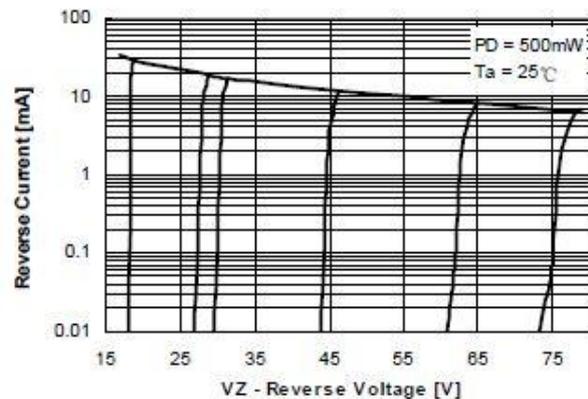


Figure 6. Reverse Current vs. Reverse Voltage

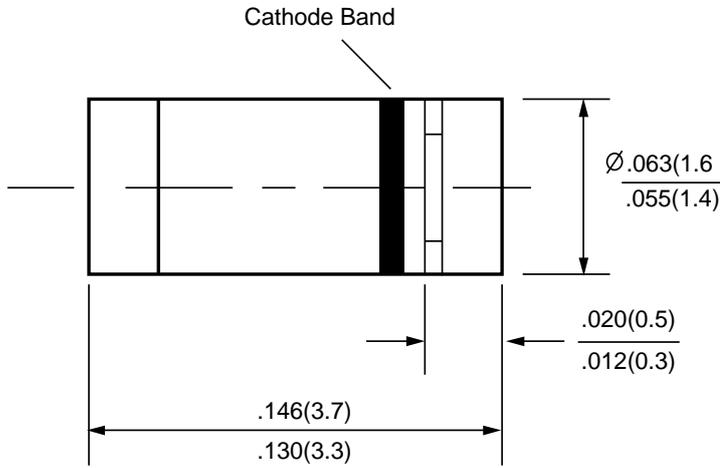


ZMM55Cxxx SERIES



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Package Outline Dimensions



MINI MELF

Dimensions in inches and (millimeters)

Tape & Reel Specification

Item	Symbol	Dimension
		millimeters
Carrier width	A	1.83 ±0.05
Carrier length	B	3.73 ±0.05
Carrier depth	C	1.80 ±0.05
Sprocket hole	d	1.55 ±0.05
Reel outside diameter	D	178 ±2
Reel inner diameter	D1	55 ±1
Feed hole width	D2	13.0 ±0.2
Sprocket hole position	E	1.75 ±0.1
Punch hole position	F	3.50 ±0.05
Punch hole pitch	P	4.0 ±0.1
Sprocket hole pitch	P0	4.0 ±0.1
Embossment center	P1	2.0 ±0.05
Tape width	W	8.0±0.1
Reel width	W1	8.4 ±1.5

