

ZMM55-B2V4 SERIES

SURFACE MOUNT ZENER DIODES

VOLTAGE 2.4 to 100 Volts

POWER 500 mWatts

MINI-MELF / LL34

Unit : inch(mm)

FEATURES

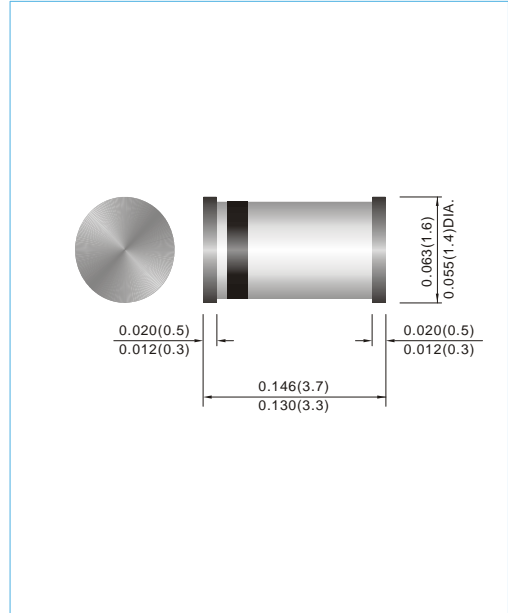
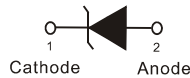
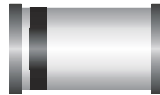
- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: Molded Glass MINI-MELF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.03 grams
- Mounting Position: Any
- Packing information

T/R - 2.5K per 7" plastic Reel

T/R - 10K per 13" plastic Reel



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation at Tamb = 25 °C	P _{TOT}	500	mW
Junction Temperature	T _J	175	°C
Storage Temperature Range	T _S	-65 to +175	°C

Valid provided that leads at a distance of 8mm from case are kept at ambient temperature.

Parameter	Symbol	Min.	Typ.	Max.	Units
Thermal Resistance Junction to Ambient Air	R _{θJA}	--	--	0.3	K/mW
Forward Voltage at I _F = 200mA	V _F	--	--	1.5	V

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Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking code
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
ZMM55-B2V4	2.4	2.35	2.45	85	5	600	1	50	1	B2V4
ZMM55-B2V7	2.7	2.65	2.75	85	5	600	1	10	1	B2V7
ZMM55-B3V0	3	2.94	3.06	85	5	600	1	4	1	B3V0
ZMM55-B3V3	3.3	3.23	3.37	85	5	600	1	2	1	B3V3
ZMM55-B3V6	3.6	3.53	3.67	85	5	600	1	2	1	B3V6
ZMM55-B3V9	3.9	3.82	3.98	85	5	600	1	2	1	B3V9
ZMM55-B4V3	4.3	4.21	4.39	75	5	600	1	1	1	B4V3
ZMM55-B4V7	4.7	4.61	4.79	60	5	600	1	0.5	1	B4V7
ZMM55-B5V1	5.1	5	5.2	35	5	550	1	0.1	1	B5V1
ZMM55-B5V6	5.6	5.49	5.71	25	5	450	1	0.1	1	B5V6
ZMM55-B6V2	6.2	6.08	6.32	10	5	200	1	0.1	2	B6V2
ZMM55-B6V8	6.8	6.66	6.94	8	5	150	1	0.1	3	B6V8
ZMM55-B7V5	7.5	7.35	7.65	7	5	50	1	0.1	5	B7V5
ZMM55-B8V2	8.2	8.04	8.36	7	5	50	1	0.1	6	B8V2
ZMM55-B9V1	9.1	8.92	9.28	10	5	50	1	0.1	7	B9V1
ZMM55-B10	10	9.8	10.2	15	5	70	1	0.1	7.5	B10V
ZMM55-B11	11	10.78	11.22	20	5	70	1	0.1	8.5	B11V
ZMM55-B12	12	11.76	12.24	20	5	90	1	0.1	9	B12V
ZMM55-B13	13	12.74	13.26	26	5	110	1	0.1	10	B13V
ZMM55-B15	15	14.7	15.3	30	5	110	1	0.1	11	B15V
ZMM55-B16	16	15.68	16.32	40	5	170	1	0.1	12	B16V
ZMM55-B18	18	17.64	18.36	50	5	170	1	0.1	14	B18V
ZMM55-B20	20	19.6	20.4	55	5	220	1	0.1	15	B20V
ZMM55-B22	22	21.56	22.44	55	5	220	1	0.1	17	B22V
ZMM55-B24	24	23.52	24.48	80	5	220	1	0.1	18	B24V
ZMM55-B27	27	26.46	27.54	80	5	220	1	0.1	20	B27V
ZMM55-B30	30	29.4	30.6	80	5	220	1	0.1	22	B30V
ZMM55-B33	33	32.34	33.66	80	5	220	1	0.1	24	B33V
ZMM55-B36	36	35.28	36.72	80	5	220	1	0.1	27	B36V
ZMM55-B39	39	38.22	39.78	90	2.5	500	1	0.1	30	B39V
ZMM55-B43	43	42.14	43.86	90	2.5	600	1	0.1	33	B43V
ZMM55-B47	47	46.06	47.94	110	2.5	700	1	0.1	36	B47V
ZMM55-B51	51	49.98	52.02	125	2.5	700	0.5	0.1	39	B51V
ZMM55-B56	56	54.88	57.12	135	2.5	1000	0.5	0.1	43	B56V
ZMM55-B62	62	60.76	63.24	150	2.5	1000	0.5	0.1	47	B62V
ZMM55-B68	68	65.66	68.34	200	2.5	1000	0.5	0.1	51	B68V
ZMM55-B75	75	73.5	76.5	250	2.5	1500	0.5	0.1	56	B75V
ZMM55-B82	82	80.36	83.64	300	2.5	2000	0.5	0.1	62	B82V
ZMM55-B91	91	89.18	92.82	450	1	5000	0.1	0.1	68	B91V
ZMM55-B100	100	98	102	450	1	5000	0.1	0.1	75	B100

Notes.

- STANDARD VOLTAGE TOLERANCE IS + 5% AND :
- SUFFIX "A" FOR + 1%
- SUFFIX "B" FOR + 2%
- SUFFIX "C" FOR + 5%
- SUFFIX "D" FOR + 20%

ZMM55-B2V4 SERIES

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

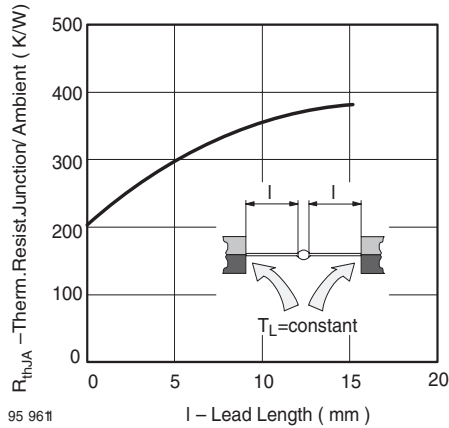


Fig. 1 Thermal Resistance vs. Lead Length

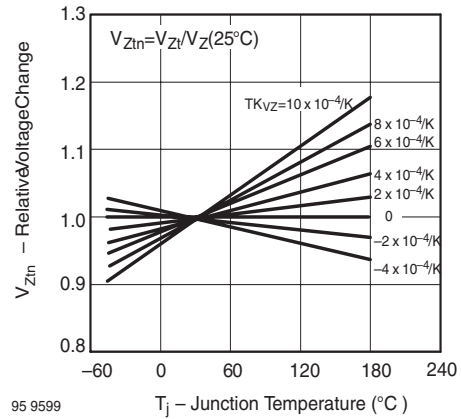


Fig. 4 Typical Change of Working Voltage vs. Junction Temperature

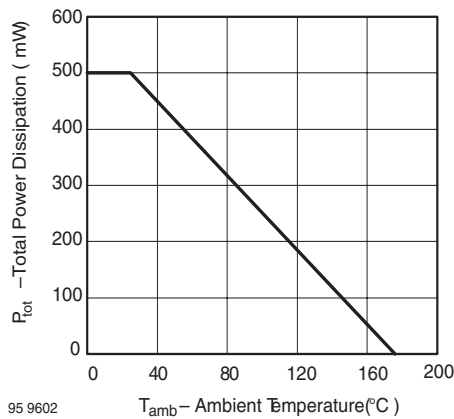


Fig. 2 Total Power Dissipation vs. Ambient Temperature

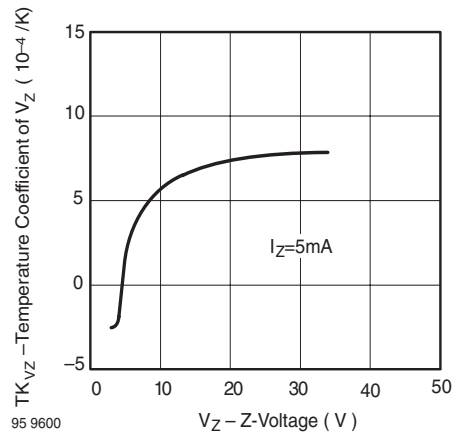


Fig. 5 Temperature Coefficient of V_Z vs. Z-Voltage

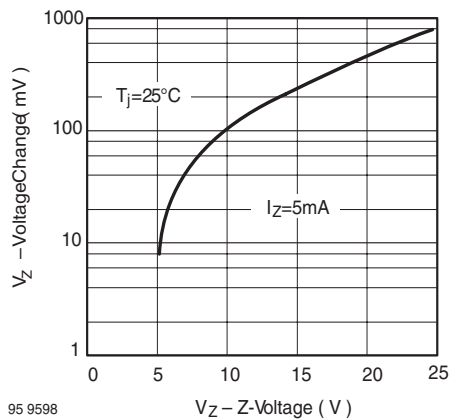


Fig. 3 Typical Change of Working Voltage under Operating Conditions at $T_{amb} = 25\text{ }^{\circ}\text{C}$

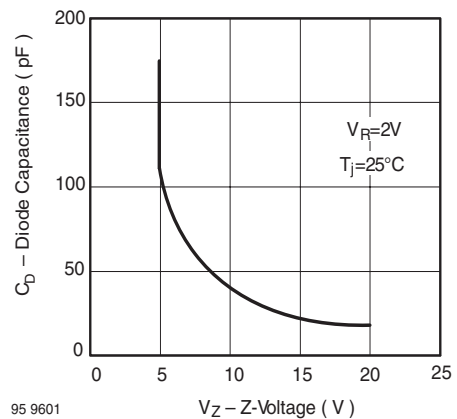


Fig. 6 Diode Capacitance vs. Z-Voltage

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Typical Characteristics ($T_{amb} = 25^\circ\text{C}$ unless otherwise specified)

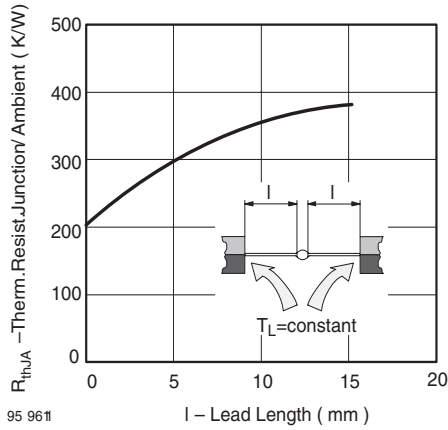


Fig. 1 Thermal Resistance vs. Lead Length

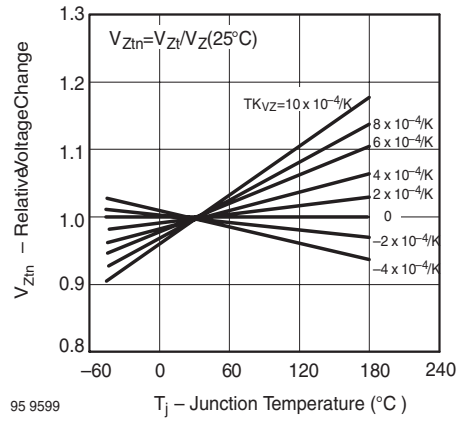


Fig. 4 Typical Change of Working Voltage vs. Junction Temperature

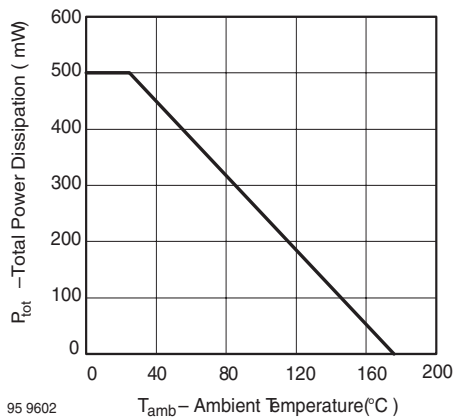


Fig. 2 Total Power Dissipation vs. Ambient Temperature

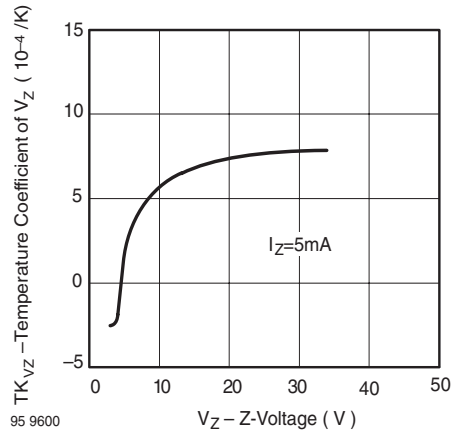


Fig. 5 Temperature Coefficient of Vz vs. Z-Voltage

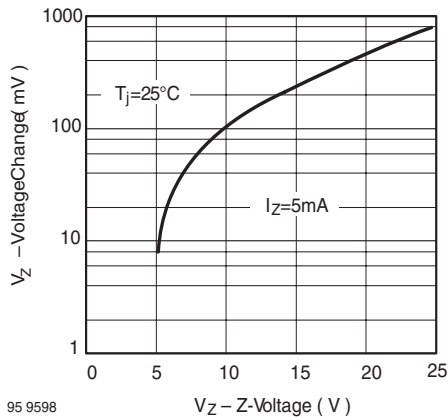


Fig. 3 Typical Change of Working Voltage under Operating Conditions at $T_{amb}=25^\circ\text{C}$

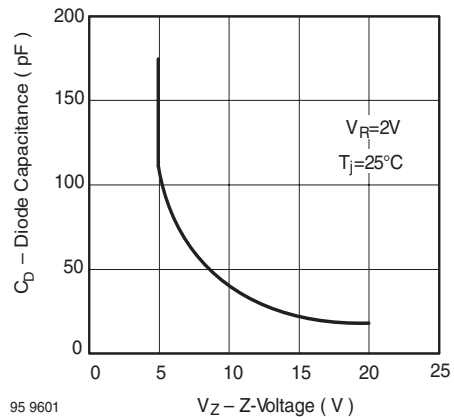


Fig. 6 Diode Capacitance vs. Z-Voltage

ZMM55-B2V4 SERIES

Part No_packing code_Version

ZMM55-B2V4_R1_10001

ZMM55-B2V4_R2_10001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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