

500mW Mini MELF Zener Diodes

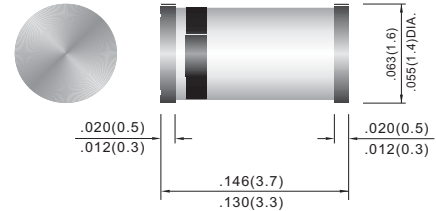
Unit : inch (mm)

Features

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- V_Z -tolerance $\pm 5\%$
- Weight 0.03g

Pb Free Product
Applications

Voltage stabilization



Maximum Ratings

$T_j = 25^\circ\text{C}$

Item	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	$T_{\text{amb}}=25^\circ\text{C}$		P_{TOT}	500	mW
Z-current			I_Z	P_V/V_Z	mA
Junction temperature			T_j	-65 to +175	$^\circ\text{C}$
Storage temperature range			T_{stg}	-65 to +175	$^\circ\text{C}$

Maximum Thermal Resistance

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	$l=9.5\text{mm (3/8")}$, $T_L=\text{constant}$	R_{thJA}	300	K/W

Electrical Characteristics

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=200\text{mA}$		V_F			1.1	V

Part No.	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		TK _{VZ}	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		
ZMM5221B	2.4	2.28	2.52	30	20.0	1200	0.25	100	1.0	< −0.085	5221
ZMM5222B	2.5	2.38	2.63	30	20.0	1250	0.25	100	1.0	< −0.085	5222
ZMM5223B	2.7	2.57	2.84	30	20.0	1300	0.25	75	1.0	< −0.080	5223
ZMM5224B	2.8	2.66	2.94	30	20.0	1400	0.25	75	1.0	< −0.080	5224
ZMM5225B	3.0	2.85	3.15	29	20.0	1600	0.25	50	1.0	< −0.075	5225
ZMM5226B	3.3	3.14	3.47	28	20.0	1600	0.25	25	1.0	< −0.070	5226
ZMM5227B	3.6	3.42	3.78	24	20.0	1700	0.25	15	1.0	< −0.065	5227
ZMM5228B	3.9	3.71	4.10	23	20.0	1900	0.25	10	1.0	< −0.060	5228
ZMM5229B	4.3	4.09	4.52	22	20.0	2000	0.25	5.0	1.0	< +0.055	5229
ZMM5230B	4.7	4.47	4.94	19	20.0	1900	0.25	5.0	2.0	< +0.030	5230
ZMM5231B	5.1	4.85	5.36	17	20.0	1600	0.25	5.0	2.0	< +0.030	5231
ZMM5232B	5.6	5.32	5.88	11	20.0	1600	0.25	5.0	3.0	< +0.038	5232
ZMM5233B	6.0	5.70	6.30	7	20.0	1600	0.25	5.0	3.5	< +0.038	5233
ZMM5234B	6.2	5.89	6.51	7	20.0	1000	0.25	5.0	4.0	< +0.045	5234
ZMM5235B	6.8	6.46	7.14	5	20.0	750	0.25	3.0	5.0	< +0.050	5235
ZMM5236B	7.5	7.13	7.88	6	20.0	500	0.25	3.0	6.0	< +0.058	5236
ZMM5237B	8.2	7.79	8.61	8	20.0	500	0.25	3.0	6.5	< +0.062	5237
ZMM5238B	8.7	8.27	9.14	8	20.0	600	0.25	3.0	6.5	< +0.065	5238
ZMM5239B	9.1	8.65	9.56	10	20.0	600	0.25	3.0	7.0	< +0.068	5239
ZMM5240B	10.0	9.50	10.50	17	20.0	600	0.25	3.0	8.0	< +0.075	5240
ZMM5241B	11.0	10.45	11.55	22	20.0	600	0.25	2.0	8.4	< +0.076	5241
ZMM5242B	12.0	11.40	12.60	30	20.0	600	0.25	1.0	9.1	< +0.077	5242
ZMM5243B	13.0	12.35	13.65	13	9.5	600	0.25	0.5	9.9	< +0.079	5243
ZMM5244B	14.0	13.30	14.70	15	9.0	600	0.25	0.1	10.0	< +0.082	5244
ZMM5245B	15.0	14.25	15.75	16	8.5	600	0.25	0.1	11.0	< +0.082	5245
ZMM5246B	16.0	15.20	16.80	17	7.8	600	0.25	0.1	12.0	< +0.083	5246
ZMM5247B	17.0	16.15	17.85	19	7.4	600	0.25	0.1	13.0	< +0.084	5247
ZMM5248B	18.0	17.10	18.90	21	7.0	600	0.25	0.1	14.0	< +0.085	5248
ZMM5249B	19.0	18.05	19.95	23	6.6	600	0.25	0.1	14.0	< +0.086	5249
ZMM5250B	20.0	19.00	21.00	25	6.2	600	0.25	0.1	15.0	< +0.086	5250
ZMM5251B	22.0	20.90	23.10	29	5.6	600	0.25	0.1	17.0	< +0.087	5251
ZMM5252B	24.0	22.80	25.20	33	5.2	600	0.25	0.1	18.0	< +0.088	5252
ZMM5253B	25.0	23.75	26.25	35	5.0	600	0.25	0.1	19.0	< +0.089	5253
ZMM5254B	27.0	25.65	28.35	41	4.6	600	0.25	0.1	21.0	< +0.090	5254
ZMM5255B	28.0	26.60	29.40	44	4.5	600	0.25	0.1	21.0	< +0.091	5255
ZMM5256B	30.0	28.50	31.50	49	4.2	600	0.25	0.1	23.0	< +0.091	5256
ZMM5257B	33.0	31.35	34.65	58	3.8	700	0.25	0.1	25.0	< +0.092	5257
ZMM5258B	36.0	34.20	37.80	70	3.4	700	0.25	0.1	27.0	< +0.093	5258
ZMM5259B	39.0	37.05	40.95	80	3.2	800	0.25	0.1	30.0	< +0.094	5259
ZMM5260B	43.0	40.85	45.15	93	3.0	900	0.25	0.1	33.0	< +0.095	5260
ZMM5261B	47.0	44.65	49.35	150	2.7	1000	0.25	0.1	36.0	< +0.095	5261
ZMM5262B	51.0	48.45	53.55	125	2.5	1100	0.25	0.1	39.0	< +0.096	5262
ZMM5263B	56.0	53.20	58.80	150	2.2	1300	0.25	0.1	43.0	< +0.096	5263
ZMM5264B	60.0	57.00	63.00	170	2.1	1400	0.25	0.1	46.0	< +0.097	5264
ZMM5265B	62.0	58.90	65.10	185	2.0	1400	0.25	0.1	47.0	< +0.097	5265
ZMM5266B	68.0	64.60	71.40	230	1.8	1600	0.25	0.1	52.0	< +0.097	5266
ZMM5267B	75.0	71.25	78.75	270	1.7	1700	0.25	0.1	56.0	< +0.098	5267

1) Based on dc-measurement at thermal equilibrium; lead length = 9.5mm (3/8"); thermal resistance of heat sink = 30K/W

RATING AND CHARACTERISTIC CURVES

