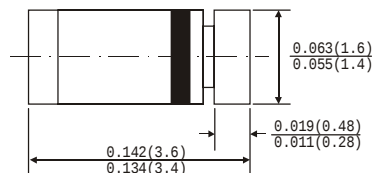


FEATURES

- Standards Zener voltage tolerance is $\pm 20\%$. Add suffix "A" for $\pm 10\%$ tolerance and suffix "B" for $\pm 5\%$ tolerance Other tolerance, non standards and higher zener voltage upon request
- These diode are also available in DO-35 case with type designation 1N5225 thru 1N5262

Mini-MELF



MECHANICAL DATA

- Case: Mini-MELF(SOD-80) glass case
- Weight: Approx. 0.05 gram

Dimensions in inches and (millimeters)

ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES) ($T_A=25\text{ }^{\circ}\text{C}$)

	<i>Symbols</i>	<i>Value</i>	<i>Units</i>
Zener current see table "Characteristics"			
Power dissipation at $T_A=75^{\circ}\text{C}$	P_{tot}	500 ¹⁾	mW
Junction temperature	T_J	175	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-65 to +175	$^{\circ}\text{C}$
1) Valid provided that electrodes are kept at ambient temperature			

ELECTRICAL CHARACTERISTICS ($T_A=25\text{ }^{\circ}\text{C}$)

	<i>Symbols</i>	<i>Min</i>	<i>Typ</i>	<i>Max</i>	<i>Units</i>
Thermal resistance junction to ambient air	$R_{\theta JA}$			300 ¹⁾	K/W
Forward voltage at $I_F=200\text{mA}$	V_F			1.1	V
1) Valid provided that electrodes are kept at ambient temperature					

ZMM5225 ... ZMM5262 SILICON PLANAR ZENER DIODES

Type	Nominal Zener Voltage	Test Current	Maximum Zener Impedance ¹⁾		Typical temperature coefficient	Maximum reverse leakage current			Maximum regulator Current ²⁾
	at I _{ZT} V _Z V	I _{ZT} mA	at I _{ZT} Z _{ZT} Ω	at I _{ZK} =0.25mA Z _{ZK} I _{ZT} mA	α _{VZ} %/K	I _R μA	Test voltage Suffix A V _R V	Suffix B V _R V	I _{ZM} mA
ZMM5225	3.0	20	29	1600	-0.075	50	0.95	1.0	152
ZMM5226	3.3	20	28	1600	-0.070	25	0.95	1.0	138
ZMM5227	3.6	20	24	1700	-0.065	15	0.95	1.0	126
ZMM5228	3.9	20	23	1900	-0.060	10	0.95	1.0	115
ZMM5229	4.3	20	22	2000	-0.055	5	0.95	1.0	106
ZMM5230	4.7	20	19	1900	± 0.030	5	1.9	2.0	97
ZMM5231	5.1	20	17	1600	± 0.030	5	1.9	2.0	89
ZMM5232	5.6	20	11	1600	+0.038	5	2.9	3.0	81
ZMM5233	6.0	20	7	1600	+0.038	5	3.3	3.5	76
ZMM5234	6.2	20	7	1000	+0.045	5	3.8	4.0	73
ZMM5235	6.8	20	5	750	+0.050	3	4.8	5.0	67
ZMM5236	7.5	20	6	500	+0.058	3	5.7	6.0	61
ZMM5237	8.2	20	8	500	+0.062	3	6.2	6.5	55
ZMM5238	8.7	20	8	600	+0.065	3	6.2	6.5	52
ZMM5239	9.1	20	10	600	+0.068	3	6.7	7.0	50
ZMM5240	10	20	17	600	+0.075	3	7.6	8.0	45
ZMM5241	11	20	22	600	+0.076	2	8.0	8.4	41
ZMM5242	12	20	30	600	+0.077	1	8.7	9.1	38
ZMM5243	13	9.5	13	600	+0.079	0.5	9.4	9.9	35
ZMM5244	14	9.0	15	600	+0.082	0.1	9.5	10	32
ZMM5245	15	8.5	16	600	+0.082	0.1	10.5	11	30
ZMM5246	16	7.8	17	600	+0.083	0.1	11.4	12	28
ZMM5247	17	7.4	19	600	+0.084	0.1	12.4	13	27
ZMM5248	18	7.0	21	600	+0.085	0.1	13.3	14	25
ZMM5249	19	6.6	23	600	+0.086	0.1	13.3	14	24
ZMM5250	20	6.2	25	600	+0.086	0.1	14.3	15	23
ZMM5251	22	5.6	29	600	+0.087	0.1	16.2	17	21
ZMM5252	24	5.2	33	600	+0.087	0.1	17.1	18	19.1
ZMM5253	25	5.0	35	600	+0.089	0.1	18.1	19	18.2
ZMM5254	27	4.6	41	600	+0.090	0.1	20	21	16.8
ZMM5255	28	4.5	44	600	+0.091	0.1	20	21	16.2
ZMM5256	30	4.2	49	600	+0.091	0.1	22	23	15.1
ZMM5257	33	3.8	58	700	+0.092	0.1	24	25	13.8
ZMM5258	36	3.4	70	700	+0.093	0.1	26	27	12.6
ZMM5259	39	3.2	80	800	+0.094	0.1	29	30	11.6
ZMM5260	43	3.0	93	900	+0.095	0.1	31	33	10.6
ZMM5261	47	2.7	105	1000	+0.095	0.1	34	36	9.7
ZMM5262	51	2.5	125	1100	+0.096	0.1	37	39	8.9

- 1) The zener impedance is derived from the 60Hz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.
- 2) Valid provided that electrodes are kept at ambient temperature.
- 3) Measured under thermal equilibrium and DC test conditions.

ZMM5225 THRU ZMM5262 SILICON PLANAR ZENER DIODES

Admissible power dissipation versus ambient temperature
(Valid provided that electrodes are kept at ambient temperature)

