ZMM52 Serise
ZENER DIODES

V_Z : 3.0 -- 75 V

POWER DISSIPATION: 500 mW

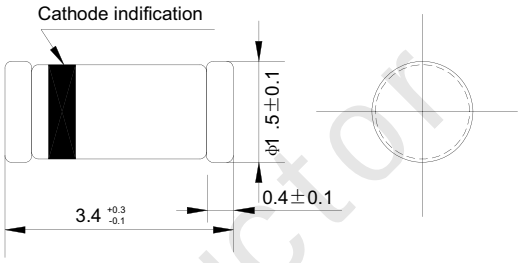
FEATURES

Silicon planar power zener diodes.
Standard zener voltage tolerance is ±5% with a "B" suffix, and ±10% with a "A" suffix.Other tolerances are available upon request.

MECHANICAL DATA

Case:JEDEC MINI-MELF,glass case.
Terminals: Solderable per MIL-STD-202,Method 208
Polarity: Color band denotes cathods end
Weight: approx.0.031 gram
Mounting position: any

MINI-MELF



Dimensions in millimeters

Maximum Ratings and Thermal Characteristics (T_A=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Zener current (see Table "Characteristics")			
Power dissipation at T_{amb}=75℃ (Note 1)	P_{tot}	500.0	mW
Maximum thermal resistance junction to ambient (Note 1)	$R_{\theta JA}$	300	K/W
Junction temperature	T_J	175	℃
Storage temperature range	T_{STG}	-55 to +175	℃

NOTE:1) Valid provided that electrodes are kept at ambient temperature.

	SYMBOL	MIN	TYP	MAX	UNIT
Forward voltage at I_F=100mA I_F=200mA	V_F	—	—	1.0 1.2	V

NOTE:1) Valid provided that electrodes are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS(Ratings at 25℃ ambient temperature unless otherwise specified)

TYPE	Nominal zener voltage		Maximum zener impedance		Typical temperature coefficient	Maximum reverse leakage current		Maximum DC zener current
	V_Z @ I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	αV_Z	I_R @ V_R		I_{ZM}
	(V)	(m A)	(Ω)	(Ω)	%/℃	(μ A)	(V)	(m A)
ZMM5225	3.0	20	29	1600	-0.075	50	1.0	151
ZMM5226	3.3	20	28	1600	-0.070	25	1.0	138
ZMM5227	3.6	20	24	1700	-0.065	15	1.0	126
ZMM5228	3.9	20	23	1900	-0.060	10	1.0	115
ZMM5229	4.3	20	22	2000	-0.055	5.0	1.0	106
ZMM5230	4.7	20	19	1900	±0.030	5.0	2.0	97
ZMM5231	5.1	20	17	1600	±0.030	5.0	2.0	89
ZMM5232	5.6	20	11	1600	+0.038	5.0	3.0	81
ZMM5233	6.0	20	7	1600	+0.038	5.0	3.5	76
ZMM5234	6.2	20	7	1000	+0.045	5.0	4.0	73
ZMM5235	6.8	20	5	750	+0.050	3.0	5.0	67
ZMM5236	7.5	20	6	500	+0.058	3.0	6.0	61
ZMM5237	8.2	20	8	500	+0.062	3.0	6.5	55
ZMM5238	8.7	20	8	600	+0.065	3.0	6.5	52
ZMM5239	9.1	20	10	600	+0.068	3.0	7.0	50
ZMM5240	10	20	17	600	+0.075	3.0	8.0	45
ZMM5241	11	20	22	600	+0.076	2.0	8.4	41
ZMM5242	12	20	30	600	+0.077	1.0	9.1	38
ZMM5243	13	9.5	13	600	+0.079	0.5	9.9	35
ZMM5244	14	9.0	15	600	+0.082	0.1	10	32
ZMM5245	15	8.5	16	600	+0.082	0.1	11	30
ZMM5246	16	7.8	17	600	+0.083	0.1	12	28
ZMM5247	17	7.4	19	600	+0.084	0.1	13	27
ZMM5248	18	7.0	21	600	+0.085	0.1	14	25
ZMM5249	19	6.6	23	600	+0.086	0.1	14	24
ZMM5250	20	6.2	25	600	+0.086	0.1	15	23
ZMM5251	22	5.6	29	600	+0.087	0.1	17	21.2
ZMM5252	24	5.2	33	600	+0.087	0.1	18	19.1
ZMM5253	25	5.0	35	600	+0.089	0.1	19	18.2
ZMM5254	27	4.6	41	600	+0.090	0.1	21	16.8
ZMM5255	28	4.5	44	600	+0.091	0.1	21	16.2
ZMM5256	30	4.2	49	600	+0.091	0.1	23	15.1
ZMM5257	33	3.8	58	700	+0.092	0.1	25	13.8
ZMM5258	36	3.4	70	700	+0.093	0.1	27	12.6
ZMM5259	39	3.2	80	800	+0.094	0.1	30	11.5
ZMM5260	43	3.0	93	900	+0.095	0.1	33	10.6
ZMM5261	47	2.7	105	1000	+0.095	0.1	36	9.7
ZMM5262	51	2.5	125	1100	+0.096	0.1	39	8.9
ZMM5263	56	2.2	150	1300	+0.096	0.1	43	-
ZMM5264	60	2.1	170	1400	+0.097	0.1	46	-
ZMM5265	62	2.0	185	1400	+0.097	0.1	47	-
ZMM5266	68	1.8	230	1600	+0.097	0.1	52	-
ZMM5267	75	1.7	270	1700	+0.098	0.1	56	-

FIG.1 – BREAKDOWN CHARACTERISTICS

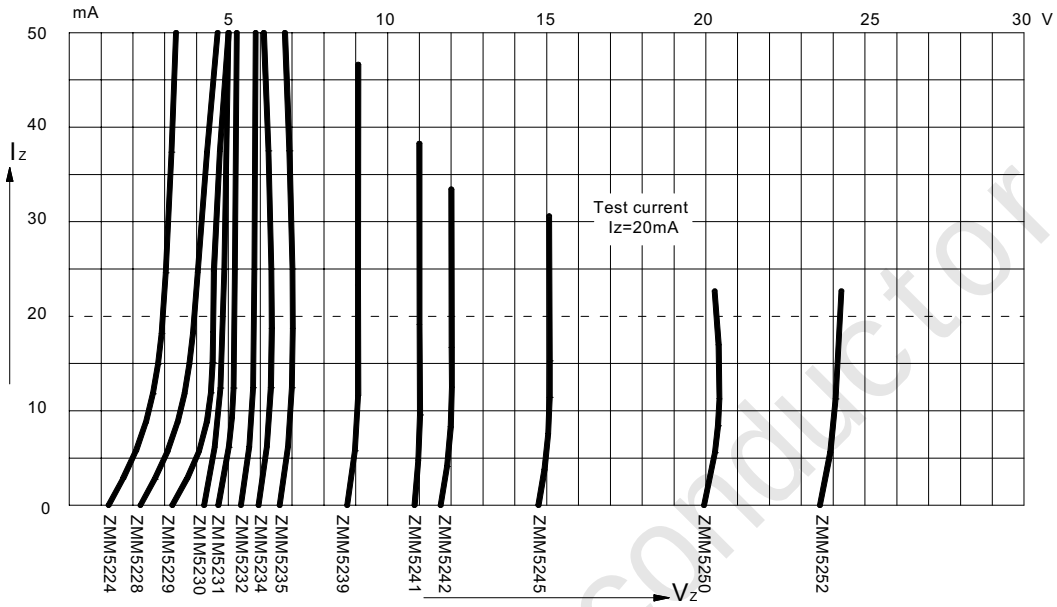


FIG.2 – ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE