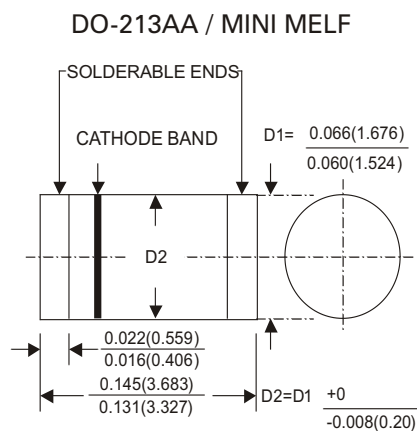


ZMM5221B(A)(C)(D) thru ZMM5267B(A)(C)(D)

SURFACE MOUNT ZENER DIODES



Dimension in inches (millimeters)

FEATURES

- Silicon planer power zener diodes
- Standard zener voltage tolerance is $\pm 5\%$ AND
α "B" suffix. Other tolerances are available upon request

MECHANICAL DATA

Case : MINI MELF Molded Glass (SOD-80)
Weight : Approx .005g

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temp. unless otherwise specified
Single phase, half sine wave, 60Hz, resistive or inductive load
For capacitive load, derate current by 20%

CHARACTERLSTIC	SYMBOL	VALUE	UNITS
Power Dissipation at $T_{amb} = 25^{\circ}\text{C}$	P_{tot}	0.5 ¹⁾	W
Z- Current	I_z	P_v/V_z	mA
Tremal Resistanct Junction to Ambient Air	R_{thJ-A}	300 ¹⁾	K/mW
Maximum instantaneous forward voltage drop at $I_f=200\text{mA DC}$	V_f	1.1	Volts
Junction Temperature	T_J	175	$^{\circ}\text{C}$
Storage Temperature range	T_{Stg}	-65 to +175	$^{\circ}\text{C}$

1)Valid provided that leads are kept at ambient temperature at adisytnance of 10mm from case

ZMM5221B(A)(C)(D) thru ZMM5267B(A)(C)(D)

SURFACE MOUNT ZENER DIODES

Type	V _{Znom} ¹⁾ V	I _{ZT} mA	for r _{zT} Ω	r _{zik} at Ω	I _{ZK} mA	I _R at μA	V _R V	TK _{VZ} %/K
ZMM5221B	2.4	20	< 30	< 1200	0.25	< 100	1.0	< -0.085
ZMM5222B	2.5	20	< 30	< 1250	0.25	< 100	1.0	< -0.085
ZMM5223B	2.7	20	< 30	< 1300	0.25	< 75	1.0	< -0.080
ZMM5224B	2.8	20	< 30	< 1400	0.25	< 75	1.0	< -0.080
ZMM5225B	3.0	20	< 29	< 1600	0.25	< 50	1.0	< -0.075
ZMM5226B	3.3	20	< 28	< 1600	0.25	< 25	1.0	< -0.070
ZMM5227B	3.6	20	< 24	< 1700	0.25	< 15	1.0	< -0.065
ZMM5228B	3.9	20	< 23	< 1900	0.25	< 10	1.0	< -0.060
ZMM5229B	4.3	20	< 22	< 2000	0.25	< 5	1.0	< +0.055
ZMM5230B	4.7	20	< 19	< 1900	0.25	< 5	2.0	< +0.030
ZMM5231B	5.1	20	< 17	< 1600	0.25	< 5	2.0	< +0.030
ZMM5232B	5.6	20	< 11	< 1600	0.25	< 5	3.0	< +0.038
ZMM5233B	6.0	20	< 7	< 1600	0.25	< 5	3.5	< +0.038
ZMM5234B	6.2	20	< 7	< 1000	0.25	< 5	4.0	< +0.045
ZMM5235B	6.8	20	< 5	< 750	0.25	< 3	5.0	< +0.050
ZMM5236B	7.5	20	< 6	< 500	0.25	< 3	6.0	< +0.058
ZMM5237B	8.2	20	< 8	< 500	0.25	< 3	6.5	< +0.062
ZMM5238B	8.7	20	< 8	< 600	0.25	< 3	6.5	< +0.065
ZMM5239B	9.1	20	< 10	< 600	0.25	< 3	7.0	< +0.068
ZMM5240B	10	20	< 17	< 600	0.25	< 3	8.0	< +0.075
ZMM5241B	11	20	< 22	< 600	0.25	< 2	8.4	< +0.076
ZMM5242B	12	20	< 30	< 600	0.25	< 1	9.1	< +0.077
ZMM5243B	13	9.5	< 13	< 600	0.25	< 0.5	9.9	< +0.079
ZMM5244B	14	9.0	< 15	< 600	0.25	< 0.1	10	< +0.082
ZMM5245B	15	8.5	< 16	< 600	0.25	< 0.1	11	< +0.082
ZMM5246B	16	7.8	< 17	< 600	0.25	< 0.1	12	< +0.083
ZMM5247B	17	7.4	< 19	< 600	0.25	< 0.1	13	< +0.084
ZMM5248B	18	7.0	< 21	< 600	0.25	< 0.1	14	< +0.085
ZMM5249B	19	6.6	< 23	< 600	0.25	< 0.1	14	< +0.086
ZMM5250B	20	6.2	< 25	< 600	0.25	< 0.1	15	< +0.086
ZMM5251B	22	5.6	< 29	< 600	0.25	< 0.1	17	< +0.087
ZMM5252B	24	5.2	< 33	< 600	0.25	< 0.1	18	< +0.088
ZMM5253B	25	5.0	< 35	< 600	0.25	< 0.1	19	< +0.089
ZMM5254B	27	4.6	< 41	< 600	0.25	< 0.1	21	< +0.090
ZMM5255B	28	4.5	< 44	< 600	0.25	< 0.1	21	< +0.091
ZMM5256B	30	4.2	< 49	< 600	0.25	< 0.1	23	< +0.091
ZMM5257B	33	3.8	< 58	< 700	0.25	< 0.1	25	< +0.092
ZMM5258B	36	3.4	< 70	< 700	0.25	< 0.1	27	< +0.093
ZMM5259B	39	3.2	< 80	< 800	0.25	< 0.1	30	< +0.094
ZMM5260B	43	3.0	< 93	< 900	0.25	< 0.1	33	< +0.095
ZMM5261B	47	2.7	< 105	< 1000	0.25	< 0.1	36	< +0.095
ZMM5262B	51	2.5	< 125	< 1100	0.25	< 0.1	39	< +0.096
ZMM5263B	56	2.2	< 150	< 1300	0.25	< 0.1	43	< +0.096
ZMM5264B	60	2.1	< 170	< 1400	0.25	< 0.1	46	< +0.097
ZMM5265B	62	2.0	< 185	< 1400	0.25	< 0.1	47	< +0.097
ZMM5266B	68	1.8	< 230	< 1600	0.25	< 0.1	52	< +0.097
ZMM5267B	75	1.7	< 270	< 1700	0.25	< 0.1	56	< +0.098

1) STANDARD VOLTAGE TOLERANCE IS $\pm 5\%$ AND
 SUFFIX "A" FOR $\pm 3\%$
 SUFFIX "B" FOR $\pm 5\%$
 SUFFIX "C" FOR $\pm 10\%$
 SUFFIX "D" FOR $\pm 20\%$
 MEASURED WITH PULSES TP=10ms

ZENER DIODE NUMBRERING SYSTEM

ZMM5225 B
 1* 1*

1* TYPE Number ZMM=ZENER MINI MELF

2* TOLERANCE OF Vz

3* ZMM5225B=3.0V $\pm 5\%$

ZMM5221B(A)(C)(D) thru ZMM5267B(A)(C)(D)

SURFACE MOUNT ZENER DIODES

RATING AND CHARACTERISTICS CURVES ZMM5221B(A)(C)(D) THRU ZMM5257B(A)(C)(D)

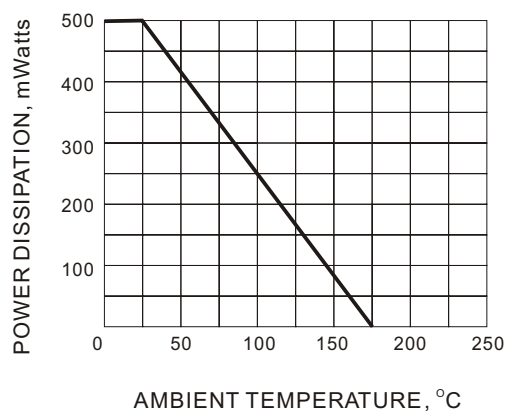


FIG.1 POWER DERATING CURVE

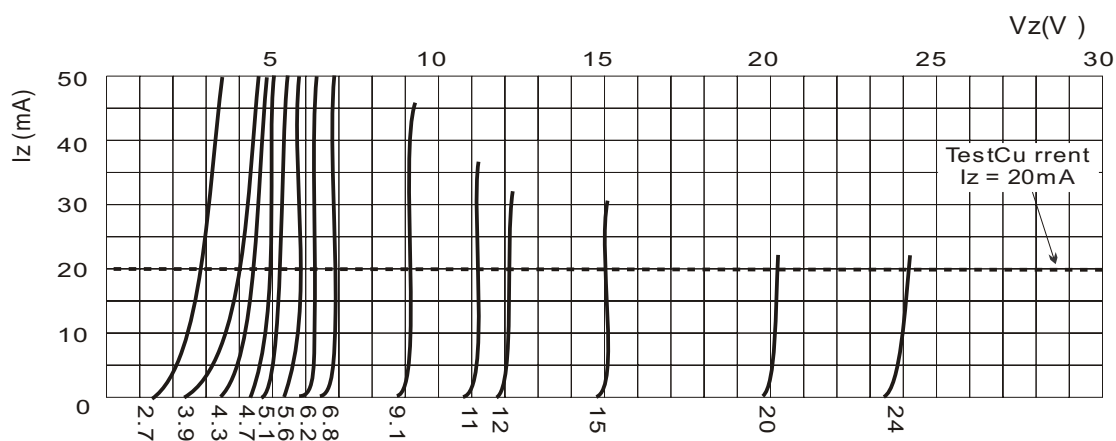


FIG.2 BREAKDOWN CHARACTERISTICS