Data Sheet

500 mWatts Glass Pack Surface Mount Zener Diode

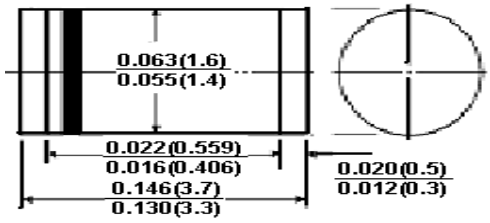
ZMM5221~5261

Description



MINI MELF GLASS

Mechanical Dimensions



Dimensions in Inches (mm)

FEATURES

- ☐ 3%, 5%, 10%, 20% VOLTAGE AVAILABLE
- ☐ WIDE VOLTAGE RANGE
- ☐ MEETS UL SPECIFICATION 94V-0

CHARACTERISTIC AT Ta=25℃

	SYMBOL	MIN	TYP	MAX	UNIT
THERMAL RESISTANCE JUNCTION TO AMBIENT AIR	RthA			0.3	k/Mw
FORWARD VOLTAGE AT IF=200mA	VF			1.1	V

* VALID PROVIDED THAT LEADS AT A DISTANCE OF 10mm FROM CASE ARE KEPT AT AMBIENT TEMPERAT

ABSOLUTE MAX. RATINGS

	SYMBOL	VALUE	UNIT
ZENER CURRENT SEE TABLE CHARACTERISTICS			
POWER DISSIPATION AT Ta=25℃	Ptot	500	mW
JUNCTION TEMPERATURE	Tj	175	℃
STORAGE TEMPERATURE RANGE	Ts	-65 to +175	℃

* VALID PROVIDED THAT LEADS AT A DISTANCE OF 10mm FROM CASE ARE KEPT AT AMBIENT TEMPERAT

FIG.1: BREAKDOWN CHARACTERISTICS

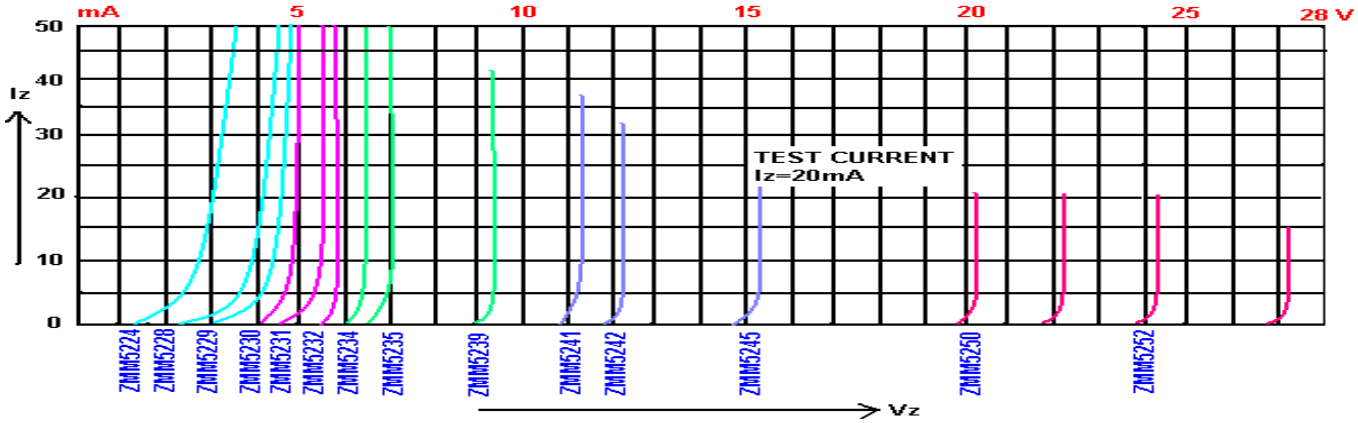
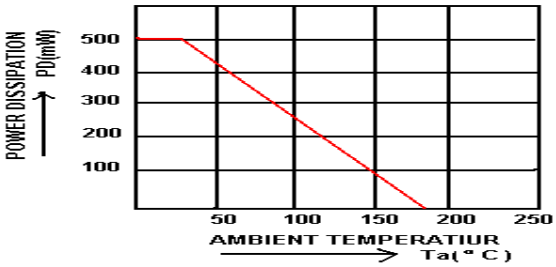


FIG.2 CHANGES IN THE POWER DISSIPATION DUE TO THE AMBIENT TEMPERATURE



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500 mWatts Glass Pack Surface Mount Zener Diode

Zener Diodes

1/2 Watt FCI Part #	Nominal Zener Voltage @ Izt Vz (V)	Test Current Izt (mA)	Maximum Zener Impedance ZzT at Izt (Ω)	Maximum Zener Impedance Zzk at Izk Izk=0.25mA (Ω)	Maximum Reverse Current @ Vr Ir (uA)	Test Voltage Vr (V)	Maximum Zener Voltage Temp. Coeff. avz (%/C)	Max. Regulator Current IzM(mA)	Package
ZMM5221	2.4	20	30	1200	100	1.0	-0.085	191.0	MIN MELF (GLASS)
ZMM5222	2.5	20	30	1250	100	1.0	-0.085	182.0	
ZMM5223	2.7	20	30	1300	75	1.0	-0.080	168.0	
ZMM5224	2.8	20	30	1400	75	1.0	-0.080	162.0	
ZMM5225	3.0	20	29	1600	50	1.0	-0.075	151.0	
ZMM5226	3.3	20	28	1600	25	1.0	-0.070	138.0	
ZMM5227	3.6	20	24	1700	15	1.0	-0.065	126.0	
ZMM5228	3.9	20	23	1900	10	1.0	-0.060	115.0	
ZMM5229	4.3	20	22	2000	5.0	1.0	+/- 0.055	106.0	
ZMM5230	4.7	20	19	1900	5.0	2.0	+/- 0.03	97.0	
ZMM5231	5.1	20	17	1600	5.0	2.0	+/- 0.03	89.0	
ZMM5232	5.6	20	11	1600	5.0	3.0	0.038	81.0	
ZMM5233	6.0	20	7.0	1600	5.0	3.5	0.038	76.0	
ZMM5234	6.2	20	7.0	1000	5.0	4.0	0.045	73.0	
ZMM5235	6.8	20	5.0	750	5.0	5.0	0.050	67.0	
ZMM5236	7.5	20	6.0	500	3.0	6.0	0.058	61.0	
ZMM5237	8.2	20	8.0	500	3.0	6.5	0.062	55.0	
ZMM5238	8.7	20	8.0	600	3.0	6.5	0.065	52.0	
ZMM5239	9.1	20	10	600	3.0	7.0	0.068	50.0	
ZMM5240	10	20	17	600	3.0	8.0	0.075	45.0	
ZMM5241	11	20	22	600	2.0	8.4	0.076	41.0	
ZMM5242	12	20	30	600	1.0	9.1	0.077	38.0	
ZMM5243	13	9.5	13	600	0.5	9.9	0.079	35.0	
ZMM5244	14	9.0	15	600	0.1	10	0.082	32.0	
ZMM5245	15	8.5	16	600	0.1	11	0.082	30.0	
ZMM5246	16	7.8	17	600	0.1	12	0.083	28.0	
ZMM5247	17	7.4	19	600	0.1	13	0.084	27.0	
ZMM5248	18	7.0	21	600	0.1	14	0.085	25.0	
ZMM5249	19	6.6	23	600	0.1	15	0.086	24.0	
ZMM5250	20	6.2	25	600	0.1	16	0.086	23.0	
ZMM5251	22	5.6	29	600	0.1	17	0.087	21.2	
ZMM5252	24	5.2	33	600	0.1	18	0.088	19.1	
ZMM5253	25	5.0	35	600	0.1	19	0.089	18.2	
ZMM5254	27	4.6	41	600	0.1	21	0.090	16.8	
ZMM5255	28	4.5	44	600	0.1	21	0.091	16.2	
ZMM5256	30	4.2	49	600	0.1	23	0.091	15.1	
ZMM5257	33	3.8	58	700	0.1	25	0.092	13.8	
ZMM5258	36	3.4	70	700	0.1	27	0.093	12.6	
ZMM5259	39	3.2	80	800	0.1	30	0.094	11.5	
ZMM5260	43	3.0	93	900	0.1	33	0.095	10.6	
ZMM5261	47	2.7	105	1000	0.1	36	0.095	9.7	

For 3%,5%,10%,20% on Zener Voltage, Specify Suffix A,B,C,D