



## SURFACE MOUNT ZENER DIODE

ZMM5225B THRU ZMM5267B

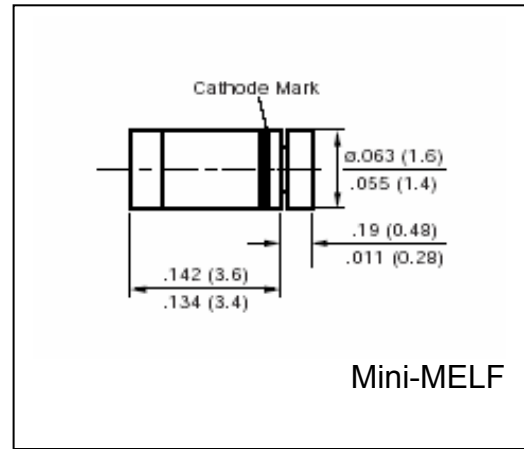
VOLTAGE RANGE	3.3 to 100 Volts
POWER DISSIPATION	500 mWatt

### FEATURES

- Planer die construction
- General Purpose, high power device
- 500 mW power dissipation
- 5% Zener Voltage tolerance
- Also available in DO-35 package as the 1N5225 series

### MECHANICAL DATA

- Case: Mini-Melf
- Terminals: Solderable per MIL-STD 750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0045 ounce, 0.05gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOL	VALUE	UNIT
Device Characteristics – See table			
Power dissipation (Note 1)	$P_D$	500	mWatt
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	300	°C/W
Operating Junction Temperature Range	$T_J$	(-65 to +175)	°C
Storage Temperature Range	$T_{STG}$	(-65 to +175)	°C

### Notes:

1. Provided terminals are kept at ambient temperature



## RATINGS FOR ZMM5225B THRU ZMM5267B

**Electrical Characteristics - All values at  $T_A = 25^{\circ}\text{C}$  unless otherwise specified**

Type Number	Zener Voltage Range (Note 2)			Test Current	Maximum Zener Impedance		Maximum Reverse Leakage Current		Maximum Regulator Current
	$V_Z$				$I_{ZT}$	@ $I_{ZT}$	@ $I_{Lk} = 0.25A$	$I_R$	
	Nom (V)	Min (V)	Max (V)	mA	Ohms		$\mu A$	Volts	mA
ZMM5225B	3.0	2.85	3.15	20	29	1600	50	1.0	152
ZMM5226B	3.3	3.14	3.47	20	28	1600	25	1.0	138
ZMM5227B	3.6	3.42	3.78	20	24	1700	15	1.0	126
ZMM5228B	3.9	3.71	4.10	20	23	1900	10	1.0	115
ZMM5229B	4.3	4.09	4.52	20	22	2000	5.0	1.0	106
ZMM5230B	4.7	4.47	4.94	20	19	1900	5.0	2.0	97
ZMM5231B	5.1	4.85	5.36	20	17	1600	5.0	2.0	89
ZMM5232B	5.6	5.32	5.88	20	11	1600	5.0	3.0	81
ZMM5233B	6.0	5.70	6.30	20	7	1600	5.0	3.5	76
ZMM5234B	6.2	5.89	6.51	20	7	100	5.0	4.0	73
ZMM5235B	6.8	6.46	7.14	20	5	750	5.0	5.0	67
ZMM5236B	7.5	7.13	7.88	20	6	500	5.0	6.0	61
ZMM5237B	8.2	7.79	8.61	20	8	500	5.0	6.5	55
ZMM5238B	8.7	8.27	9.14	20	8	600	5.0	6.5	52
ZMM5239B	9.1	8.65	9.56	20	10	600	5.0	7.0	50
ZMM5240B	10	9.50	10.50	20	17	600	5.0	8.0	45
ZMM5241B	11	10.45	11.55	20	22	600	5.0	8.4	41
ZMM5242B	12	11.40	12.60	20	30	600	5.0	9.1	38
ZMM5243B	13	12.35	13.65	9.5	13	600	5.0	9.9	35
ZMM5244B	14	13.30	14.70	9.0	15	600	5.0	10	32
ZMM5245B	15	14.25	15.75	8.5	16	600	5.0	11	30
ZMM5246B	16	15.20	16.80	7.8	17	600	5.0	12	28
ZMM5247B	17	16.15	17.85	7.4	19	600	5.0	13	27
ZMM5248B	18	17.10	18.90	7.0	21	600	5.0	14	25
ZMM5249B	19	18.05	19.95	6.6	23	600	5.0	14	24
ZMM5250B	20	19.00	21.00	6.2	25	600	5.0	15	23
ZMM5251B	22	20.90	23.10	5.6	29	600	5.0	17	21
ZMM5252B	24	22.80	25.20	5.2	33	600	5.0	18	19.1
ZMM5253B	25	23.75	26.25	5.0	35	600	5.0	19	18.2
ZMM5254B	27	25.65	28.35	4.6	41	600	5.0	21	16.8
ZMM5255B	28	26.60	29.40	4.5	44	600	5.0	21	16.2
ZMM5256B	30	28.50	31.50	4.2	49	600	5.0	23	15.1
ZMM5257B	33	31.35	34.65	3.8	58	700	5.0	25	13.8
ZMM5258B	36	34.20	37.80	3.4	70	700	5.0	27	12.6
ZMM5259B	39	37.05	40.95	3.2	80	800	5.0	30	11.6
ZMM5260B	43	40.85	45.15	3.0	93	900	5.0	33	10.6
ZMM5261B	47	44.65	49.35	2.7	105	1000	5.0	36	9.7
ZMM5262B	51	48.45	53.55	2.5	125	1100	5.0	39	8.9
ZMM5263B	56	53.20	58.80	2.2	150	1300	5.0	43	-
ZMM5264B	60	57.00	63.00	2.1	170	1400	5.0	46	-
ZMM5265B	62	54.90	65.10	2.0	185	1400	5.0	47	-
ZMM5266B	68	64.60	71.40	1.8	230	1600	5.0	52	-
ZMM5267B	75	71.25	78.75	1.7	270	1700	5.0	56	-

**Notes:**

1. Zener impedance is derived from the 1KHz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current is superimposed on  $I_{ZT}$  or  $I_{ZK}$ .
2. Measured under thermal equilibrium and DC test conditions
3. Valid provided that electrodes at a distance of 10mm from the case are kept at ambient temperature.



CHARACTERISTIC CURVES ZMM5225B THRU ZMM5267B

