



**THE DATASHEET OF
MMBZ5231BW_R1_00001**



MMBZ5221BW ~ MMBZ5267BW Series

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 2.4 to 75 Volts **POWER** 200 mWatts

SOT-323

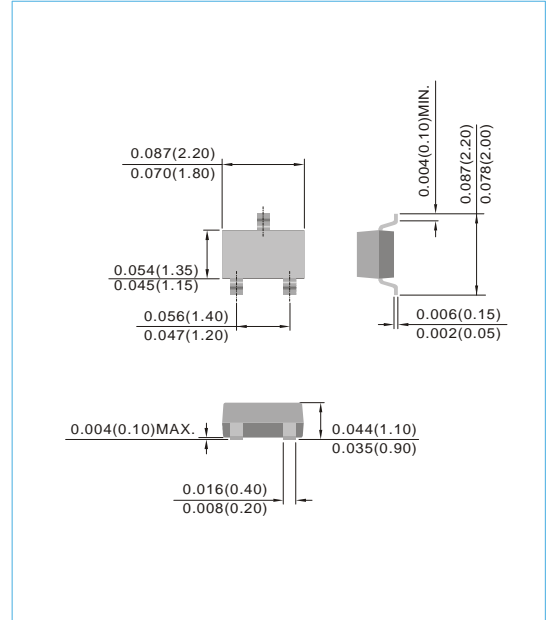
Unit : inch(mm)

FEATURES

- Planar Die construction
- 200mW Power Dissipation
- Zener Voltages from 2.4V~75V
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case : SOT-323, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Apprx. Weight : 0.005 grams

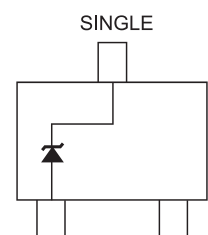


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNITS
Power Dissipation @ $T_A=25^{\circ}\text{C}$ (Note 1)	P_D	200	mW
Operating Junction Temperature and Storage Temperature Range	T_J	-55 to +150	$^{\circ}\text{C}$

NOTES :

1. Mounted on 100cm^2 (1mm thick) copper areas.



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Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	Vz @ IZT			Z _{ZT} @ IZT		Z _{ZK} @ IZK		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
200 mWatts Zener Diodes										
MMBZ5221BW	2.4	2.28	2.52	30	20.0	1200	0.25	100	1.0	C1
MMBZ5222BW	2.5	2.38	2.63	30	20.0	1250	0.25	100	1.0	C2
MMBZ5223BW	2.7	2.57	2.84	30	20.0	1300	0.25	75	1.0	C3
MMBZ5224BW	2.8	2.66	2.94	30	20	1400	0.25	75	1.0	C4
MMBZ5225BW	3.0	2.85	3.15	30	20.0	1600	0.25	50	1.0	C5
MMBZ5226BW	3.3	3.14	3.47	28	20.0	1600	0.25	25	1.0	D1
MMBZ5227BW	3.6	3.42	3.78	24	20.0	1700	0.25	15	1.0	D2
MMBZ5228BW	3.9	3.71	4.10	23	20.0	1900	0.25	10	1.0	D3
MMBZ5229BW	4.3	4.09	4.52	22	20.0	2000	0.25	5.0	1.0	D4
MMBZ5230BW	4.7	4.47	4.94	19	20.0	1900	0.25	5.0	2.0	D5
MMBZ5231BW	5.1	4.85	5.36	17	20.0	1600	0.25	5.0	2.0	E1
MMBZ5232BW	5.6	5.32	5.88	11	20.0	1600	0.25	5.0	3.0	E2
MMBZ5233BW	6.0	5.7	6.3	7.0	20	1600	0.25	5.0	3.5	E3
MMBZ5234BW	6.2	5.89	6.51	7	20.0	1000	0.25	5.0	4.0	E4
MMBZ5235BW	6.8	6.46	7.14	5	20.0	750	0.25	3.0	5.0	E5
MMBZ5236BW	7.5	7.13	7.88	6	20.0	500	0.25	3.0	6.0	F1
MMBZ5237BW	8.2	7.79	8.61	8	20.0	500	0.25	3.0	6.0	F2
MMBZ5238BW	8.7	8.27	9.14	8	20.0	600	0.25	3.0	6.5	F3
MMBZ5239BW	9.1	8.65	9.56	10	20.0	600	0.25	3.0	6.5	F4
MMBZ5240BW	10	9.50	10.50	17	20.0	600	0.25	3.0	8.0	F5
MMBZ5241BW	11	10.45	11.55	22	20.0	600	0.25	2.0	8.4	H1
MMBZ5242BW	12	11.40	12.60	30	20.0	600	0.25	1.0	9.1	H2
MMBZ5243BW	13	12.35	13.65	13	9.5	600	0.25	0.5	9.9	H3
MMBZ5244BW	14	13.30	14.70	15	9.0	600	0.25	0.1	10.5	H4
MMBZ5245BW	15	14.25	15.75	16	8.5	600	0.25	0.1	11	H5
MMBZ5246BW	16	15.20	16.80	17	7.8	600	0.25	0.1	12	J1
MMBZ5247BW	17	16.15	17.85	19	7.5	600	0.25	0.1	13	J2
MMBZ5248BW	18	17.10	18.90	21	7.0	600	0.25	0.1	14	J3
MMBZ5249BW	19	18.05	19.95	23	6.6	600	0.25	0.1	14	J4
MMBZ5250BW	20	19.00	21.00	25	6.2	600	0.25	0.1	15	J5
MMBZ5251BW	22	20.90	23.10	29	5.6	600	0.25	0.1	17	K1
MMBZ5252BW	24	22.80	25.20	33	5.2	600	0.25	0.1	18	K2
MMBZ5253BW	25	23.75	26.25	35	5.0	600	0.25	0.1	19	K3
MMBZ5254BW	27	25.65	28.35	41	5.0	600	0.25	0.1	21	K4
MMBZ5255BW	28	26.60	29.40	44	4.5	600	0.25	0.1	21	K5
MMBZ5256BW	30	28.50	31.50	49	4.2	600	0.25	0.1	23	M1
MMBZ5257BW	33	31.35	34.65	58	3.8	700	0.25	0.1	25	M2
MMBZ5258BW	36	34.20	37.80	70	3.4	700	0.25	0.1	27	M3
MMBZ5259BW	39	37.05	40.95	80	3.2	800	0.25	0.1	30	M4
MMBZ5260BW	43	40.85	45.15	93	3.0	900	0.25	0.1	33	M5
MMBZ5261BW	47	44.65	49.35	105	2.7	1000	0.25	0.1	36	N1
MMBZ5262BW	51	48.45	53.55	125	2.5	1100	0.25	0.1	39	N2

MMBZ5221BW ~ MMBZ5267BW Series

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
MMBZ5263BW	56	53.2	58.8	150	2.2	1300	0.25	0.1	43	N3
MMBZ5264BW	60	57	63	170	2.1	1400	0.25	0.1	46	N4
MMBZ5265BW	62	58.9	65.1	185	2	1500	0.25	0.1	47	N5
MMBZ5266BW	68	64.6	71.4	230	1.8	1600	0.25	0.1	52	P1
MMBZ5267BW	75	71.25	78.75	270	1.7	1400	0.25	0.1	56	P2

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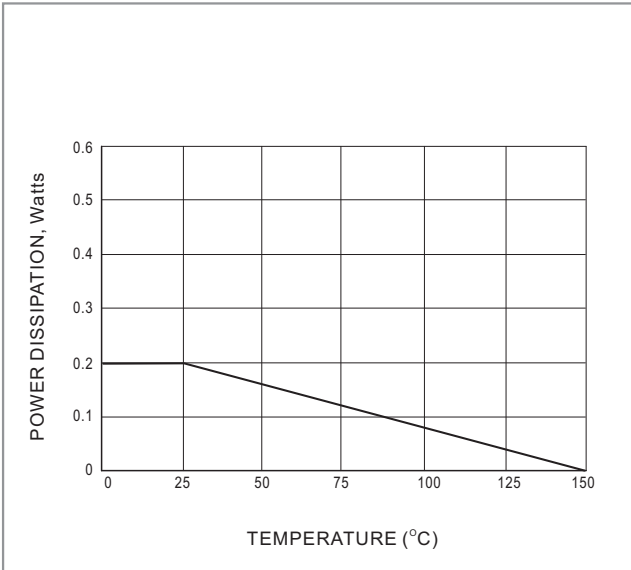


Fig.1 STEADY STATE POWER DERATING

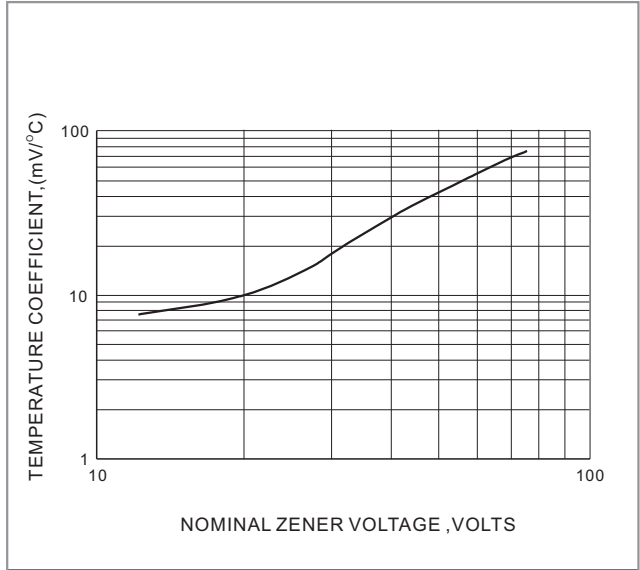


Fig.2 TEMPERATURE COEFFICIENTS

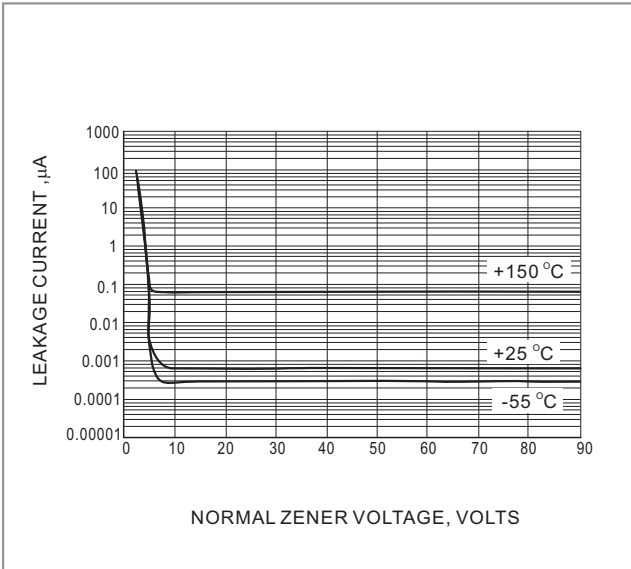


Fig.3 TYPICAL LEAKAGE CURRENT

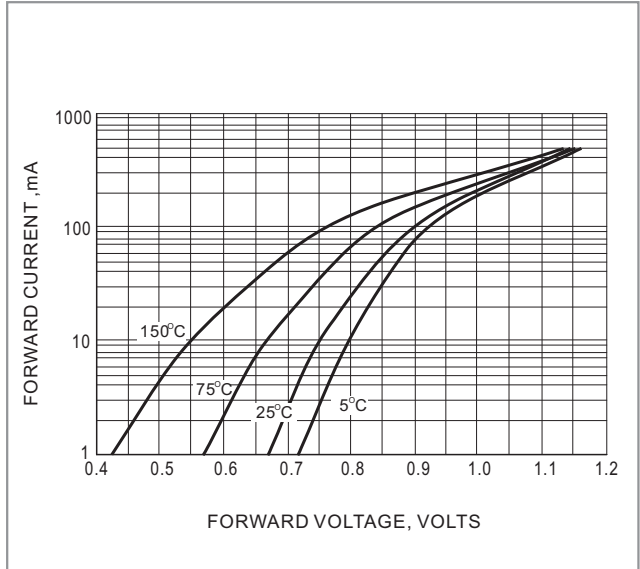


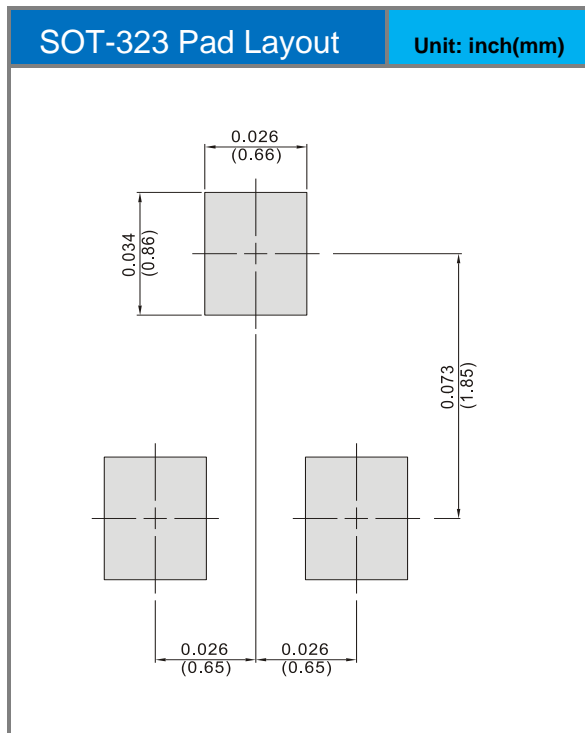
Fig.4 TYPICAL FORWARD VOLTAGE

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
MMBZ52xxBW	SOT-323	3K pcs / 7" reel	See Table

Mounting Pad Layout



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