



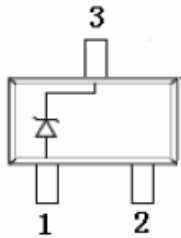
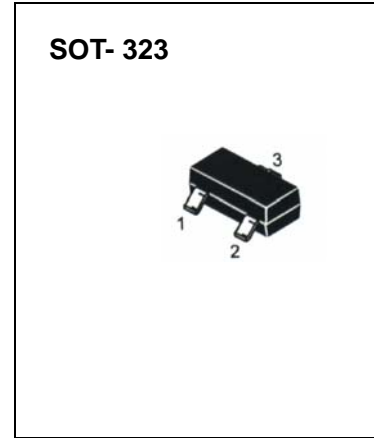
**SOT-323 Plastic-Encapsulate Diode**

**MMBZ5221BW-MMBZ5259BW ZENER DIODE**

**FEATURES:**

- Planar Die Construction
- 200mW Power Dissipation on FR-4 PCB
- General purpose, Medium Current
- Ideally Suited for Automated Assembly

Marking: see table on page2 The first code



**Maximum Ratings @ Ta= 25°C unless otherwise specified**

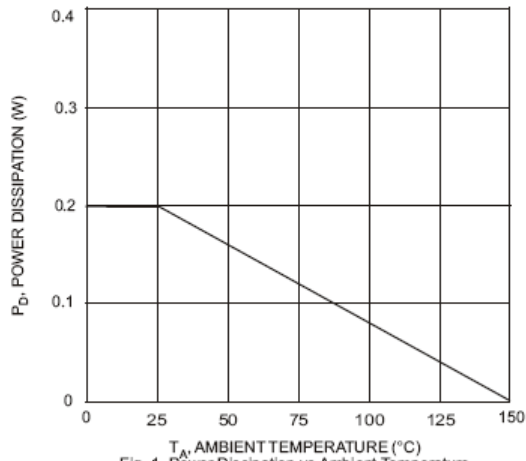
Characteristic	Symbol	Value	Unit
Forward Voltage @ I <sub>F</sub> = 10mA	V <sub>F</sub>	0.9	V
Power Dissipation	P <sub>d</sub>	200	mW
Thermal Resistance, Junction to Ambient Air	R <sub>θJA</sub>	625	°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150	°C

**ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)**

Type Number	Marking Code	Zener Voltage Range (Note 1)			Test Current	Maximum Zener Impedance (Note 2)		Maximum Reverse Leakage Current (Note 1)	
		Vz @ IzT			IzT	ZzT @ IzT	Zzk @ Izk = 0.25mA	IR	@VR
		Nom (V)	Min (V)	Max (V)	mA	Ω		μA	V
MMBZ5221BW	KC1	2.4	2.28	2.52	20	30	1200	100	1.0
MMBZ5222BW	KC2	2.5	2.38	2.63	20	30	1250	100	1.0
MMBZ5223BW	KC3	2.7	2.57	2.84	20	30	1300	75	1.0
MMBZ5225BW	KC5	3.0	2.85	3.15	20	30	1600	50	1.0
MMBZ5226BW	KG1	3.3	3.14	3.47	20	28	1600	25	1.0
MMBZ5227BW	KG2	3.6	3.42	3.78	20	24	1700	15	1.0
MMBZ5228BW	KG3	3.9	3.71	4.10	20	23	1900	10	1.0
MMBZ5229BW	KG4	4.3	4.09	4.52	20	22	2000	5.0	1.0
MMBZ5230BW	KG5	4.7	4.47	4.94	20	19	1900	5.0	2.0
MMBZ5231BW	KE1	5.1	4.85	5.36	20	17	1600	5.0	2.0
MMBZ5232BW	KE2	5.6	5.32	5.88	20	11	1600	5.0	3.0
MMBZ5233BW	KE3	6.0	5.70	6.30	20	7	1600	5.0	3.5
MMBZ5234BW	KE4	6.2	5.89	6.51	20	7	1000	5.0	4.0
MMBZ5235BW	KE5	6.8	6.46	7.14	20	5	750	3.0	5.0
MMBZ5236BW	KF1	7.5	7.13	7.88	20	6	500	3.0	6.0
MMBZ5237BW	KF2	8.2	7.79	8.61	20	8	500	3.0	6.5
MMBZ5238BW	KF3	8.7	8.27	9.14	20	8	600	3.0	6.5
MMBZ5239BW	KF4	9.1	8.65	9.56	20	10	600	3.0	7.0
MMBZ5240BW	KF5	10	9.50	10.50	20	17	600	3.0	8.0
MMBZ5241BW	KH1	11	10.45	11.55	20	22	600	2.0	8.4
MMBZ5242BW	KH2	12	11.40	12.60	20	30	600	1.0	9.1
MMBZ5243BW	KH3	13	12.35	13.65	9.5	13	600	0.5	9.9
MMBZ5244BW	KH4	14	13.30	14.70	9.0	15	600	0.1	10
MMBZ5245BW	KH5	15	14.25	15.75	8.5	16	600	0.1	11
MMBZ5246BW	KJ1	16	15.20	16.80	7.8	17	600	0.1	12
MMBA5247BW	KJ2	17	16.15	17.85	7.4	19	600	0.1	13
MMBZ5248BW	KJ3	18	17.10	18.90	7.0	21	600	0.1	14
MMBZ5249BW	KJ4	19	18.05	19.95	6.6	23	600	0.1	14
MMBZ5250BW	KJ5	20	19.00	21.00	6.2	25	600	0.1	15
MMBZ5251BW	KK1	22	20.90	23.10	5.6	29	600	0.1	17
MMBZ5252BW	KK2	24	22.80	25.20	5.2	33	600	0.1	18
MMBZ5253BW	KK3	25	23.75	26.25	5.0	35	600	0.1	19
MMBZ5254BW	KK4	27	25.65	28.35	5.0	41	600	0.1	21
MMBZ5255BW	KK5	28	26.60	29.40	4.5	44	600	0.1	21
MMBZ5256BW	KM1	30	28.50	31.50	4.2	49	600	0.1	23
MMBZ5257BW	KM2	33	31.35	34.65	3.8	58	700	0.1	25
MMBZ5258BW	KM3	36	34.20	37.80	3.4	70	700	0.1	27
MMBZ5259BW	KM4	39	37.05	40.95	3.2	80	800	0.1	30

Notes: 1. Short duration test pulse used to minimize self-heating effect.  
 2. f = 1KHz.

# Typical Characteristics



# MMBZ5221BW-MMBZ5259BW

