

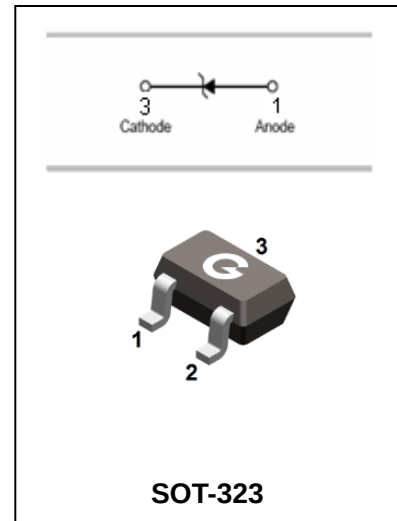
200mW Surface Mount Zener Diode

MMBZ5221BW-5259BW

FEATURES

- Planar Die Construction
- 200mw Power Dissipation
- General purpose, medium current
- Ideally Suited For Automated Assembly Processes
- RoHS compliant with Halogen-free

HF



APPLICATIONS

- 200Mw Surface mount zener diode

ORDERING INFORMATION

Type No.	Marking	Package Code
MMBZ5221BW-MMBZ5259BW	See Table on page2	SOT-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Voltage@I _F =10mA	V _F	0.9	V
Power Dissipation	P _D	200	mW
Operating and Storage Temperature Range	T _j , T _{stg}	-65 to+150	°C

200mW Surface Mount Zener Diode

MMBZ5221BW-5259BW

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Type Number	Marking Code	Zener Voltage Range				Maximum Zener Impedance		Maximum Reverse Leakage Current	
		V _Z @I _{ZT}			I _{ZT}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK} =0.25mA	I _R	V _R
		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	5.7	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	9.5	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	13.3	14.7	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
MMBZ5248BW	KJ3	18	17.1	18.90	7.0	21	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
MMBZ5254BW	KK4	27	25.65	28.35	5.0	41	600	0.1	21

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Type Number	Marking Code	Zener Voltage Range				Maximum Zener Impedance		Maximum Reverse Leakage Current	
		$V_Z @ I_{ZT}$			I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}=0.25mA$	I_R	V_R
		Nom(V)	Min(V)	Max(V)	(mA)	(Ω)		(μA)	(V)
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

TYPICAL CHARACTERISTICS @ $T_a=25^{\circ}C$ unless otherwise specified

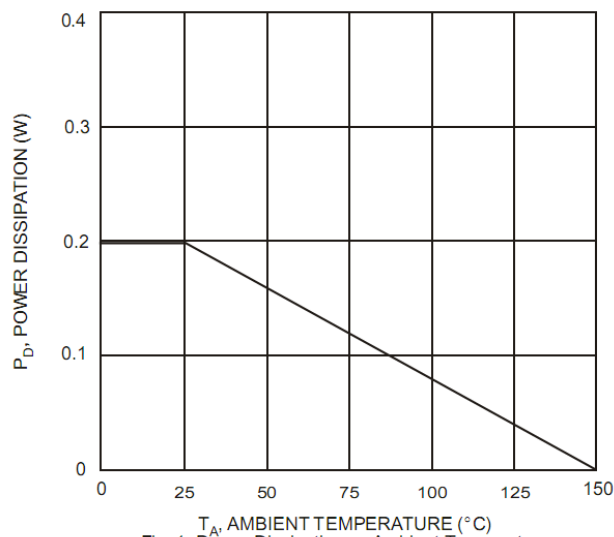


Fig. 1 Power Dissipation vs Ambient Temperature

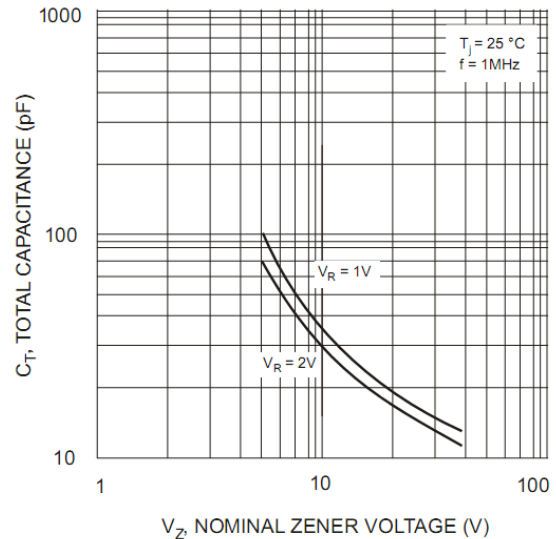


Fig. 2 Total Capacitance vs Nominal Zener Voltage

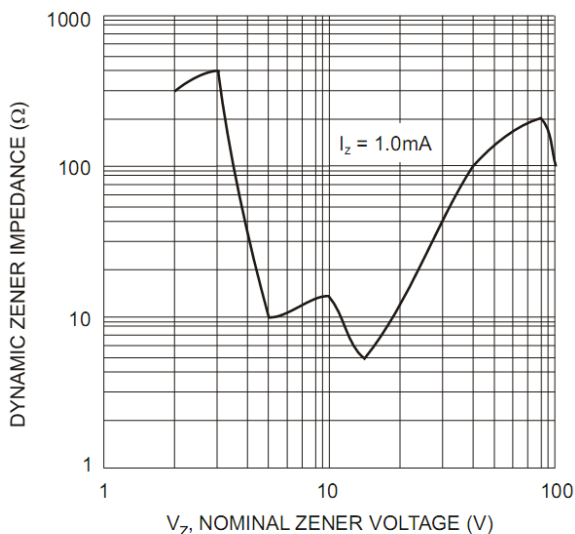


Fig. 3 Zener Voltage vs. Zener Impedance

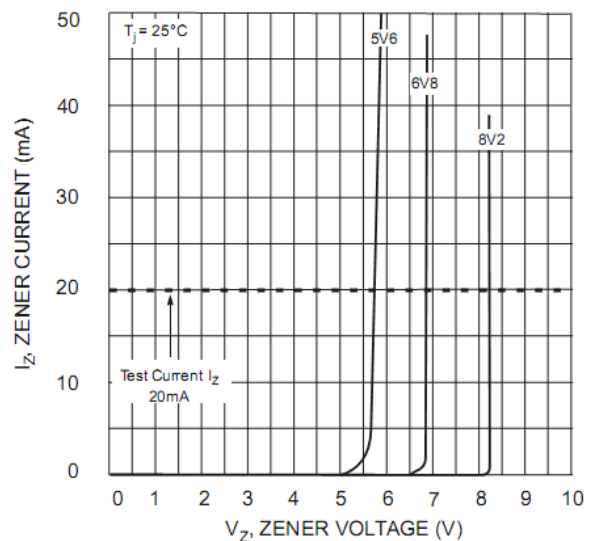


Fig. 4 Zener Breakdown Characteristics

200mW Surface Mount Zener Diode

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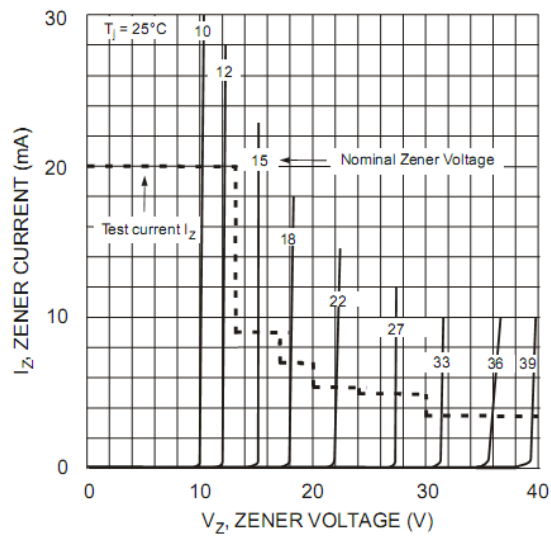


Fig. 5 Zener Breakdown Characteristics

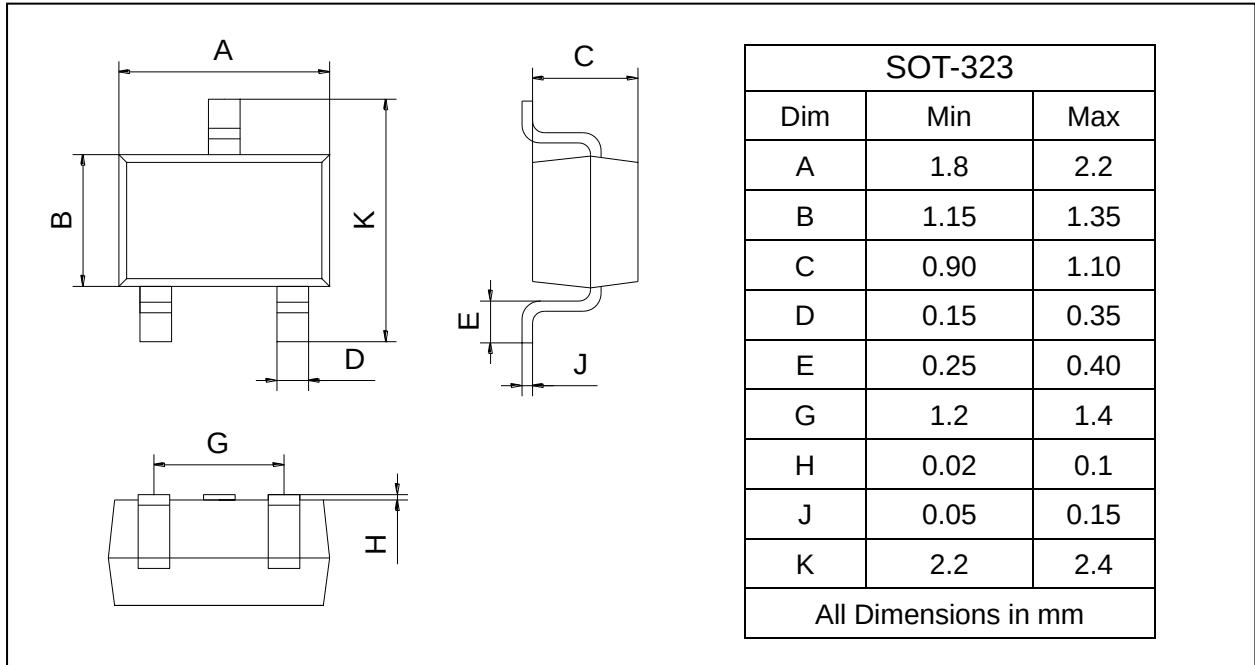
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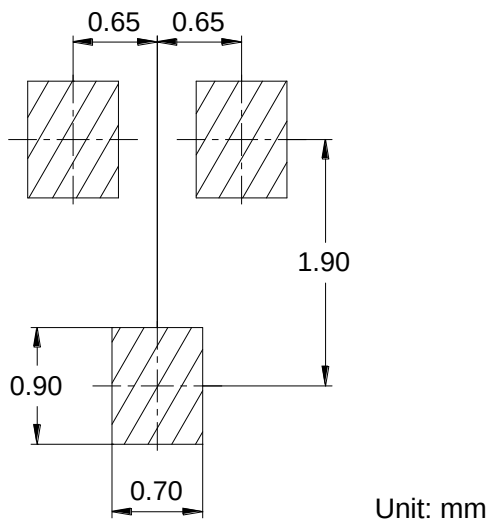
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
MMBZ5221BW-5259BW	SOT-323	3000 pcs / Tape & Reel