

350mW Surface Mount Zener Diode

MMBZ5221B-5259B

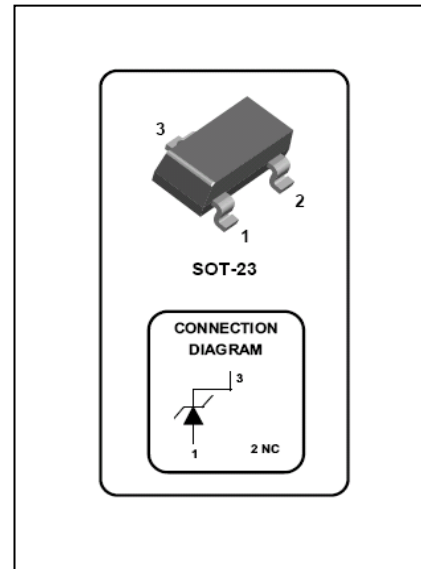
FEATURES

- Planar Die Construction.
- 350mw Power Dissipation.
- General purpose, medium current.
- Ideally Suited For Automated Assembly Prcesses.



APPLICATIONS

- 350Mw Surface mount zener diode



ORDERING INFORMATION

Type No.	Marking	Package Code
MMBZ5221B-MMBZ5259B	See Table on page2	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Valtage@I _F =10mA	V _F	0.9	V
Power Dissipation	P _d	350	mW
Thermal Resistance, Junction to Ambient Air	R _{θJA}	357	°C/W
Operating and Storage Temperature Range	T _j , T _{stg}	-65 to+150	°C

Notes: 1. Valid provided that device terminals are kept at ambient temperature.

2. Tested with pulses, T_P ≤ 1.0ms.

Diode Semiconductor Korea

350mW Surface Mount Zener Diode

MMBZ5221B-5259B

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)
MMBZ5221B	KC1	2.4	2.28	2.52	20	30	1200	100	1.0
MMBZ5222B	KC2	2.5	2.38	2.63	20	30	1250	100	1.0
MMBZ5223B	KC3	2.7	2.57	2.84	20	30	1300	75	1.0
MMBZ5225B	KC5	3.0	2.85	3.15	20	30	1600	50	1.0
MMBZ5226B	KG1	3.3	3.14	3.47	20	28	1600	25	1.0
MMBZ5227B	KG2	3.6	3.42	3.78	20	24	1700	15	1.0
MMBZ5228B	KG3	3.9	3.71	4.10	20	23	1900	10	1.0
MMBZ5229B	KG4	4.3	4.09	4.52	20	22	2000	5.0	1.0
MMBZ5230B	KG5	4.7	4.47	4.94	20	19	1900	5.0	2.0
MMBZ5231B	KE1	5.1	4.85	5.36	20	17	1600	5.0	2.0
MMBZ5232B	KE2	5.6	5.32	5.88	20	11	1600	5.0	3.0
MMBZ5233B	KE3	6.0	5.7	6.30	20	7	1600	5.0	3.5
MMBZ5234B	KE4	6.2	5.89	6.51	20	7	1000	5.0	4.0
MMBZ5235B	KE5	6.8	6.46	7.14	20	5	750	3.0	5.0
MMBZ5236B	KF1	7.5	7.13	7.88	20	6	500	3.0	6.0
MMBZ5237B	KF2	8.2	7.79	8.61	20	8	500	3.0	6.5
MMBZ5238B	KF3	8.7	8.27	9.14	20	8	600	3.0	6.5
MMBZ5239B	KF4	9.1	8.65	9.56	20	10	600	3.0	7.0

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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)
MMBZ5240B	KF5	10	9.5	10.50	20	17	600	3.0	8.0
MMBZ5241B	KH1	11	10.45	11.55	20	22	600	2.0	8.4
MMBZ5242B	KH2	12	11.40	12.60	20	30	600	1.0	9.1
MMBZ5243B	KH3	13	12.35	13.65	9.5	13	600	0.5	9.9
MMBZ5245B	KH5	15	14.25	15.75	8.5	16	600	0.1	11
MMBZ5246B	KJ1	16	15.20	16.80	7.8	17	600	0.1	12
MMBZ5248B	KJ3	18	17.1	18.90	7.0	21	600	0.1	14
MMBZ5250B	KJ5	20	19.00	21.00	6.2	25	600	0.1	15
MMBZ5251B	KK1	22	20.90	23.10	5.6	29	600	0.1	17
MMBZ5252B	KK2	24	22.80	25.20	5.2	33	600	0.1	18
MMBZ5254B	KK4	27	25.65	28.35	5.0	41	600	0.1	21
MMBZ5255B	KK5	28	26.60	29.40	4.5	44	600	0.1	21
MMBZ5256B	KM1	30	28.50	31.50	4.2	49	600	0.1	23
MMBZ5257B	KM2	33	31.35	34.65	3.8	58	700	0.1	25
MMBZ5258B	KM3	36	34.20	37.80	3.4	70	700	0.1	27
MMBZ5259B	KM4	39	37.05	40.95	3.2	80	800	0.1	30

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

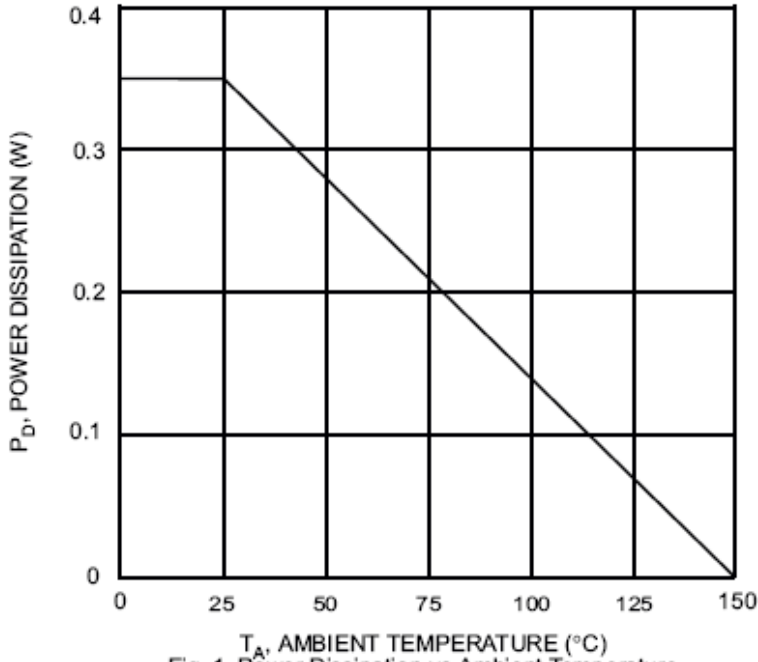


Fig. 1 Power Dissipation vs Ambient Temperature

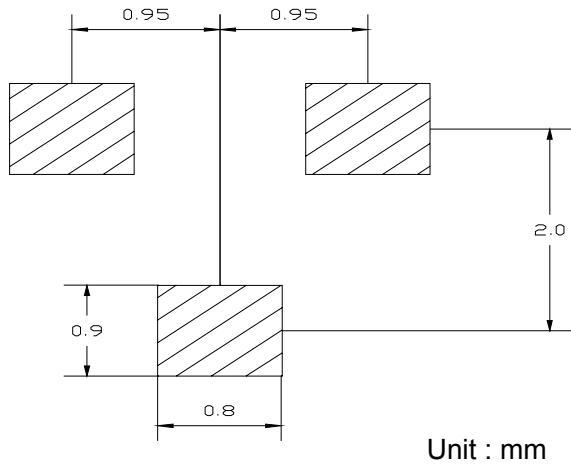
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23

SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMBZ5221B-5259B	SOT-23	3000/Tape&Reel