

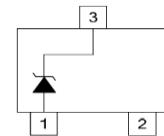
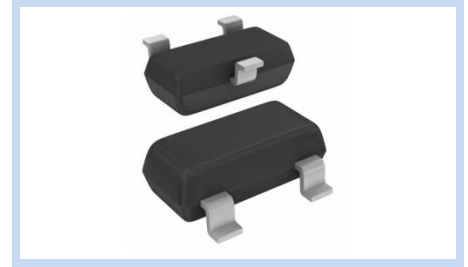
Zener Diodes SOT-23

MMBZ52-B Series

MERITEK

FEATURE

- Zener Voltage Range: 2.4V to 51V
- Power Dissipation: 350mW
- Package Designed for Optimal Automated Board Assembly
- Small Package Size for High Density Applications
- Application: Power Management Systems, Voltage Regulation



MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- Terminals: Solderable Per MIL-STD-750, Method 2026



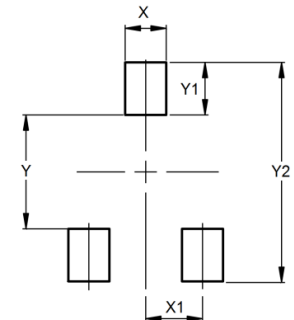
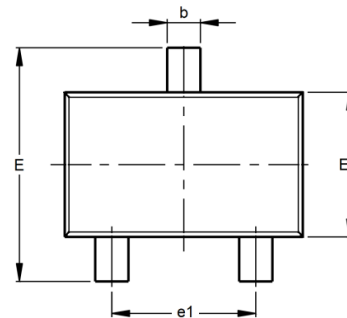
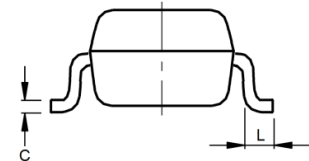
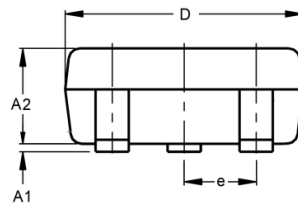
ABSOLUTE MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	P_D	350	mW
Forward Voltage at $I_F=10\text{mA}$	V_F	0.9	V
Resistance Junction to Ambient	$R_{\theta JA}$	357	$^{\circ}\text{C}/\text{W}$
Junction Temperature Range	T_J	-65~+150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65~+150	$^{\circ}\text{C}$

Note: $T_A = 25^{\circ}\text{C}$ unless otherwise noted

DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A1	0.01	0.1
A2	0.95	1.40
b	0.35	0.5
C	0.08	0.19
D	2.70	3.10
e	0.89	1.02
e1	1.78	2.04
E	2.20	3.00
E1	1.20	1.65
L	0.2	-
X	3.4	3.4
X1	1.4	1.4
Y	0.9	0.9
Y1	0.7	0.7
Y2	2.0	2.0



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ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage				Max Zener Impedance Z_{ZT} at I_{ZT} , Z_{ZK} at $I_{ZK}=0.25mA$		Max Reverse Leakage Current	
	V_Z at I_{ZT}			I_{ZT} (mA)	Z_{ZT} (Ω)	Z_{ZK} (Ω)	I_R at V_R	
	Nom (V)	Min (V)	Max (V)				(μA)	(V)
MMBZ5221B	2.4	2.2	2.6	20	30	1200	100	1.0
MMBZ5223B	2.7	2.5	2.9	20	30	1300	75	1.0
MMBZ5225B	3.0	2.8	3.2	20	30	1600	50	1.0
MMBZ5226B	3.3	3.1	3.5	20	28	1600	25	1.0
MMBZ5227B	3.6	3.4	3.8	20	24	1700	15	1.0
MMBZ5228B	3.9	3.7	4.1	20	23	1900	10	1.0
MMBZ5229B	4.3	4.0	4.6	20	22	2000	5.0	1.0
MMBZ5230B	4.7	4.4	5.0	20	19	1900	5.0	2.0
MMBZ5231B	5.1	4.8	5.4	20	17	1600	5.0	2.0
MMBZ5232B	5.6	5.2	6.0	20	11	1600	5.0	3.0
MMBZ5234B	6.2	5.8	6.6	20	7	1000	5.0	4.0
MMBZ5235B	6.8	6.4	7.2	20	5	750	3.0	5.0
MMBZ5236B	7.5	7.0	7.9	20	6	500	3.0	6.0
MMBZ5237B	8.2	7.7	8.7	20	8	500	3.0	6.5
MMBZ5239B	9.1	8.5	9.6	20	10	600	3.0	7.0
MMBZ5240B	10	9.4	10.6	20	17	600	3.0	8.0
MMBZ5241B	11	10.4	11.6	20	22	600	2.0	8.4
MMBZ5242B	12	11.4	12.7	20	30	600	1.0	9.1
MMBZ5243B	13	12.4	14.1	9.5	13	600	0.5	9.9
MMBZ5245B	15	13.8	15.6	8.5	16	600	0.1	11
MMBZ5246B	16	15.3	17.1	7.8	17	600	0.1	12
MMBZ5248B	18	16.8	19.1	7.0	21	600	0.1	14
MMBZ5250B	20	18.8	21.2	6.2	25	600	0.1	15
MMBZ5251B	22	20.8	23.3	5.6	29	600	0.1	17
MMBZ5252B	24	22.8	25.6	5.2	33	600	0.1	18
MMBZ5254B	27	25.1	28.9	4.6	41	600	0.1	21
MMBZ5256B	30	28.0	32.0	4.2	49	600	0.1	23
MMBZ5257B	33	31.0	35.0	3.8	58	700	0.1	25
MMBZ5258B	36	34.0	38.0	3.4	70	700	0.1	27
MMBZ5259B	39	37.0	41.0	3.2	80	800	0.1	30
MMBZ5260B	43	40.0	46.0	3.0	93	800	0.1	33
MMBZ5261B	47	44.0	50.0	2.7	105	1000	0.1	36
MMBZ5262B	51	48.0	54.0	2.5	125	1100	0.1	39

Note:

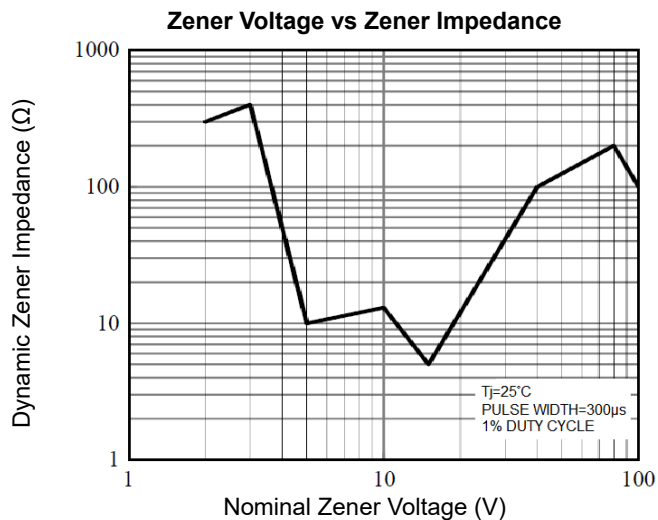
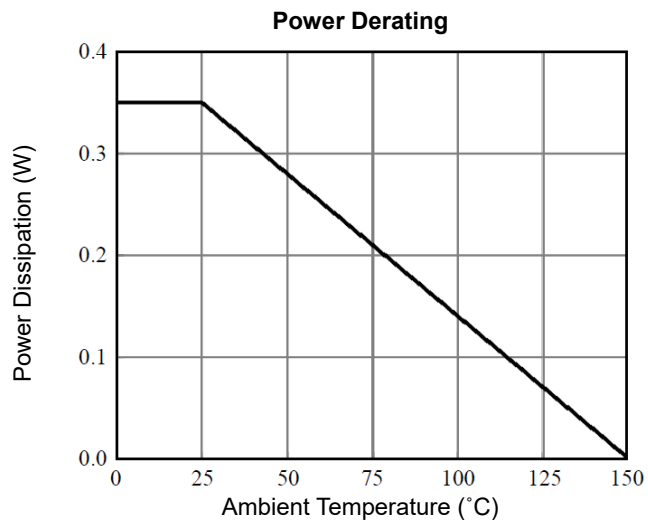
1. $T_A = 25^\circ C$ unless otherwise noted
2. Tested with pulses $t_p=20ms$

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CHARACTERISTIC CURVES



*Specifications subject to change without notice.