SOT-23 Plastic-Encapsulate Zener Diode

Features

- Low Zener Impedance
- 300mW; Power Dissipation of 300mW
- High Stability and High Reliability

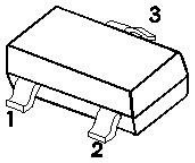
Pb
RoHS
COMPLIANT

SOT-23

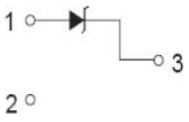
Mechanical Data

- SOT-23 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any

Pin definition



Epuivalent circuit



Maximum Ratings & Electrical Characteristics (T_A=25°C unless otherwise noted)			
Parameters	**Symbol**	**Value**	**Unit**
Power dissipation	Pd	500	mW
Forward v oltage @IF=10mA	Vf	0.9	V
Storage temperature range	Ts	-65-+150	℃
Junction/ operating t emperature	Tj	150	℃
Thermal Resistance, Junction-to-Ambient	RθJA	417	℃/W
Thermal Resistance, Junction-to-Lead	RθJL	150	℃/W

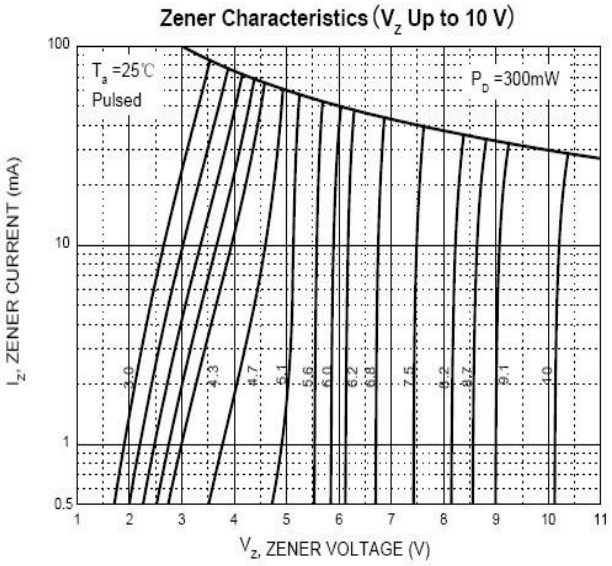
1 Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm²
2 Short duration test pulse used to minimize self-heating effect
3 Thermal Resistance measurement obtained via infrared Scan Method.
4 f=1KHz

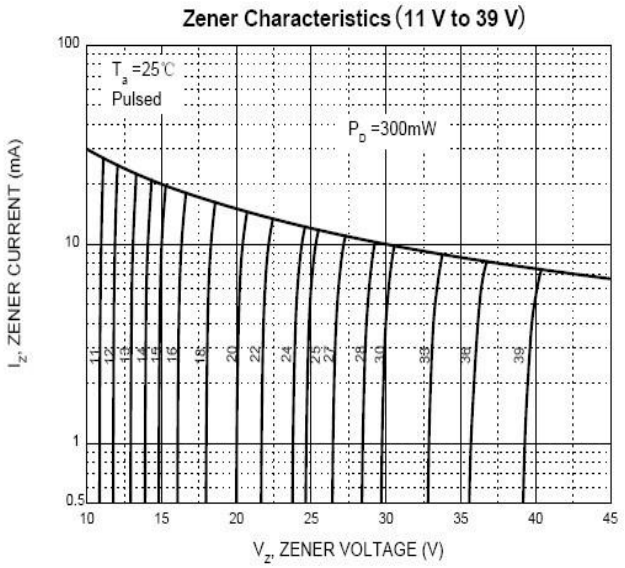
Electrical Characteristics (TA=25℃ unless otherwise noted)

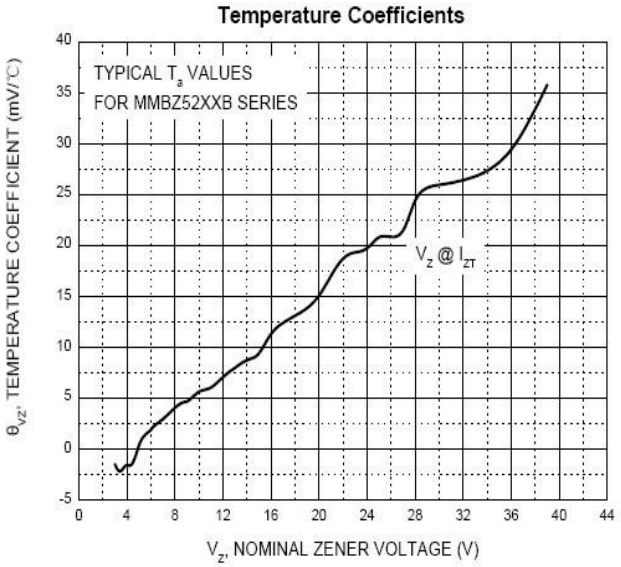
Part Number	Marking	Vz1(@Izt)			Zzt@Izt	Zzk		IR	
		Min	Max	Izt	Max	Max	Izk	Max	VR
		(V)	(V)	mA	Ω	Ω	mA	uA	V
MMBZ5221B	KC1	2.28	2.52	20	30	1200	0.25	100	1.0
MMBZ5222B	KC2	2.38	2.63	20	30	1250	0.25	100	1.0
MMBZ5223B	KC3	2.57	2.84	20	30	1300	0.25	75	1.0
MMBZ5224B	KC4	2.66	2.94	20	30	1400	0.25	75	1.0
MMBZ5225B	KC5	2.85	3.15	20	30	1600	0.25	50	1.0
MMBZ5226B	KG1	3.14	3.47	20	28	1600	0.25	25	1.0
MMBZ5227B	KG2	3.42	3.78	20	24	1700	0.25	15	1.0
MMBZ5228B	KG3	3.71	4.10	20	23	1900	0.25	10	1.0
MMBZ5229B	KG4	4.09	4.52	20	22	2000	0.25	5.0	1.0
MMBZ5230B	KG5	4.47	4.94	20	19	1900	0.25	5.0	2.0
MMBZ5231B	KE1	4.85	5.36	20	17	1600	0.25	5.0	2.0
MMBZ5232B	KE2	5.32	5.88	20	11	1600	0.25	5.0	3.0
MMBZ5233B	KE3	5.70	6.30	20	7	1600	0.25	5.0	3.5
MMBZ5234B	KE4	5.89	6.51	20	7	1000	0.25	5.0	4.0
MMBZ5235B	KE5	6.46	7.14	20	5	750	0.25	3	5.0
MMBZ5236B	KF1	7.13	7.88	20	6	500	0.25	3	6.0
MMBZ5237B	KF2	7.79	8.61	20	8	500	0.25	3	6.5
MMBZ5238B	KF3	8.27	9.14	20	8	600	0.25	3	6.5
MMBZ5239B	KF4	8.65	9.56	20	10	600	0.25	3	7.0
MMBZ5240B	KF5	9.50	10.50	20	17	600	0.25	3	8.0
MMBZ5241B	KH1	10.45	11.55	20	22	600	0.25	2.0	8.4
MMBZ5242B	KH2	11.40	12.60	20	30	600	0.25	1.0	9.1
MMBZ5243B	KH3	12.35	13.65	9.5	13	600	0.25	0.5	9.9
MMBZ5244B	KH4	13.30	14.70	9.0	15	600	0.25	0.1	10
MMBZ5245B	KH5	14.25	15.75	8.5	16	600	0.25	0.1	11
MMBZ5246B	KJ1	15.20	16.80	7.8	17	600	0.25	0.1	12
MMBZ5247B	KJ2	16.15	17.85	7.5	19	600	0.25	0.1	13
MMBZ5248B	KJ3	17.10	18.90	7.0	21	600	0.25	0.1	14
MMBZ5249B	KJ4	18.05	19.95	6.6	23	600	0.25	0.1	14
MMBZ5250B	KJ5	19.00	21.00	6.2	25	600	0.25	0.1	15
MMBZ5251B	KK1	20.90	23.10	5.6	29	600	0.25	0.1	17
MMBZ5252B	KK2	22.80	25.20	5.2	33	600	0.25	0.1	18
MMBZ5253B	KK3	23.75	26.25	5.0	35	600	0.25	0.1	19
MMBZ5254B	KK4	25.65	28.35	5.0	41	600	0.25	0.1	21
MMBZ5255B	KK5	26.60	29.40	4.5	44	600	0.25	0.1	21
MMBZ5256B	KM1	28.50	31.50	4.2	49	600	0.25	0.1	23
MMBZ5257B	KM2	31.35	34.65	3.8	58	700	0.25	0.1	25
MMBZ5258B	KM3	34.20	37.80	3.4	70	700	0.25	0.1	27
MMBZ5259B	KM4	37.05	40.95	3.2	80	800	0.25	0.1	30
MMBZ5260B	KM5	40.85	45.15	3.0	93	900	0.25	0.1	33
MMBZ5261B	KN1	44.65	49.35	2.7	105	1000	0.25	0.1	36
MMBZ5262B	KN2	48.45	53.55	2.5	125	1100	0.25	0.1	39
MMBZ5263B	KN3	53.20	58.80	2.2	150	1300	0.25	0.1	43
MMBZ5264B	KN4	57.00	63.00	2.1	170	1400	0.25	0.1	46
MMBZ5265B	KN5	58.90	65.10	2.0	185	1400	0.25	0.1	47
MMBZ5266B	KP1	64.60	71.40	1.8	230	1600	0.25	0.1	52
MMBZ5267B	KP2	71.25	78.75	1.7	270	1700	0.25	0.1	56

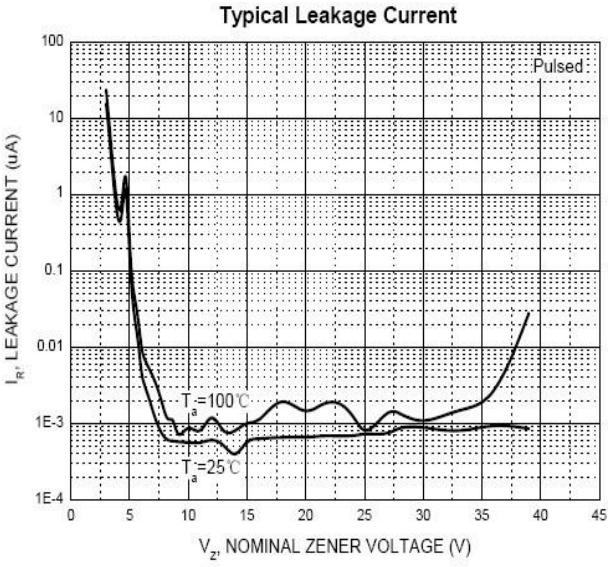
Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)









Ratings and Characteristics Curves

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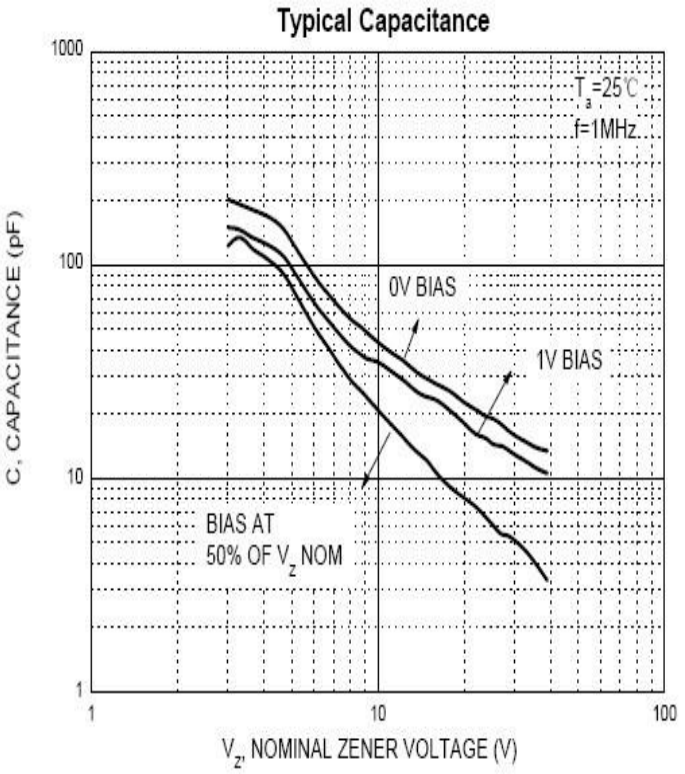
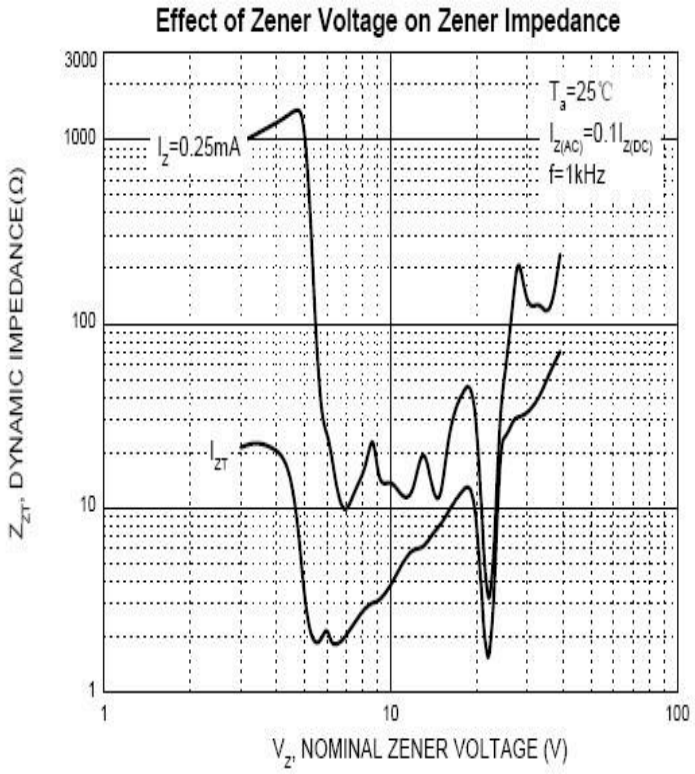
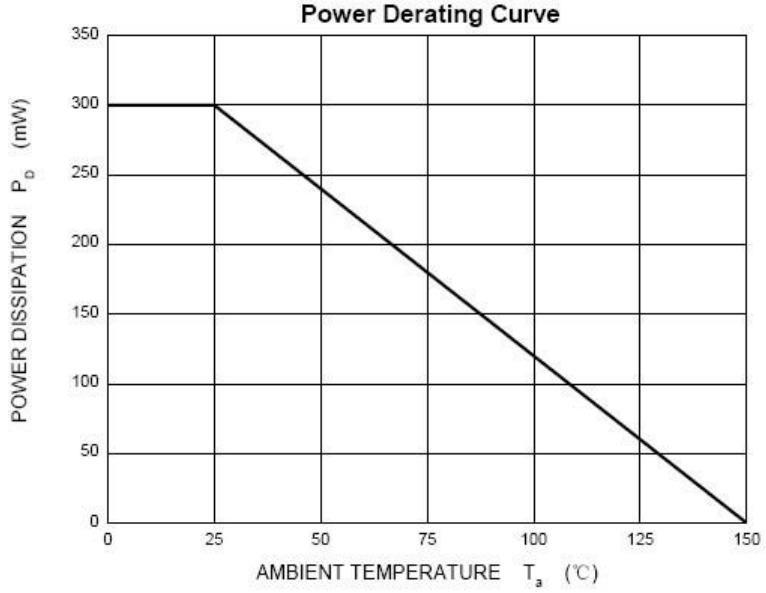
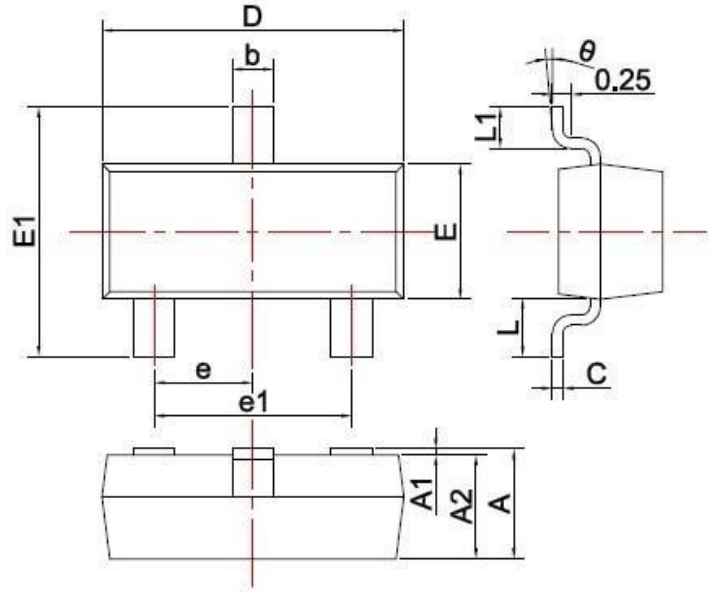






Package Outline Dimensions

millimeters



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2019.10.31	First issue

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