GOOD-ARK
SEMICONDUCTOR

GSMMBZ52xxB

Plastic Encapsulate Zener Diodes
Vz Range: 2.4 to 75V Power Dissipation: 500mW

Electrical Characteristics (T_A=25°C unless otherwise noted)

Part Number	Marking	Vz1(@Izt)			Zzt@Izt	Zzk		I_R	
		Min	Max	Izt	Max	Max	Izk	Max	V_R
		(V)	(V)	mA	Ω	Ω	mA	uA	V
GSMMBZ5233B	KE3	5.70	6.30	20.0	7	1600	0.25	5.0	3.5
GSMMBZ5234B	KE4	5.89	6.51	20.0	7	1000	0.25	5.0	4.0
GSMMBZ5235B	KE5	6.46	7.14	20.0	5	750	0.25	3.0	5.0
GSMMBZ5236B	KF1	7.13	7.88	20.0	6	500	0.25	3.0	6.0
GSMMBZ5237B	KF2	7.79	8.61	20.0	8	500	0.25	3.0	6.5
GSMMBZ5238B	KF3	8.27	9.14	20.0	8	600	0.25	3.0	6.5
GSMMBZ5239B	KF4	8.65	9.56	20.0	10	600	0.25	3.0	7.0
GSMMBZ5240B	KF5	9.50	10.50	20.0	17	600	0.25	3.0	8.0
GSMMBZ5241B	KH1	10.45	11.55	20.0	22	600	0.25	2.0	8.4
GSMMBZ5242B	KH2	11.40	12.60	20.0	30	600	0.25	1.0	9.1
GSMMBZ5243B	KH3	12.35	13.65	9.5	13	600	0.25	0.5	9.9
GSMMBZ5244B	KH4	13.30	14.70	9.0	15	600	0.25	0.1	10.0
GSMMBZ5245B	KH5	14.25	15.75	8.5	16	600	0.25	0.1	11.0
GSMMBZ5246B	KJ1	15.20	16.80	7.8	17	600	0.25	0.1	12.0
GSMMBZ5247B	KJ2	16.15	17.85	7.5	19	600	0.25	0.1	13.0
GSMMBZ5248B	KJ3	17.10	18.90	7.0	21	600	0.25	0.1	14.0
GSMMBZ5249B	KJ4	18.05	19.95	6.6	23	600	0.25	0.1	14.0
GSMMBZ5250B	KJ5	19.00	21.00	6.2	25	600	0.25	0.1	15.0
GSMMBZ5251B	KK1	20.90	23.10	5.6	29	600	0.25	0.1	17.0
GSMMBZ5252B	KK2	22.80	25.20	5.2	33	600	0.25	0.1	18.0
GSMMBZ5253B	KK3	23.75	26.25	5.0	35	600	0.25	0.1	19.0
GSMMBZ5254B	KK4	25.65	28.35	5.0	41	600	0.25	0.1	21.0
GSMMBZ5255B	KK5	26.60	29.40	4.5	44	600	0.25	0.1	21.0
GSMMBZ5256B	KM1	28.50	31.50	4.2	49	600	0.25	0.1	23.0
GSMMBZ5257B	KM2	31.35	34.65	3.8	58	700	0.25	0.1	25.0
GSMMBZ5258B	KM3	34.20	37.80	3.4	70	700	0.25	0.1	27.0
GSMMBZ5259B	KM4	37.05	40.95	3.2	80	800	0.25	0.1	30.0
GSMMBZ5260B	KM5	40.85	45.15	3.0	93	900	0.25	0.1	33.0
GSMMBZ5261B	KN1	44.65	49.35	2.7	105	1000	0.25	0.1	36.0
GSMMBZ5262B	KN2	48.45	53.55	2.5	125	1100	0.25	0.1	39.0
GSMMBZ5263B	KN3	53.20	58.80	2.2	150	1300	0.25	0.1	43.0
GSMMBZ5264B	KN4	57.00	63.00	2.1	170	1400	0.25	0.1	46.0
GSMMBZ5265B	KN5	58.90	65.10	2.0	185	1400	0.25	0.1	47.0
GSMMBZ5266B	KP1	64.60	71.40	1.8	230	1600	0.25	0.1	52.0
GSMMBZ5267B	KP2	71.25	78.75	1.7	270	1700	0.25	0.1	56.0

Typical Electrical Characteristic Curves

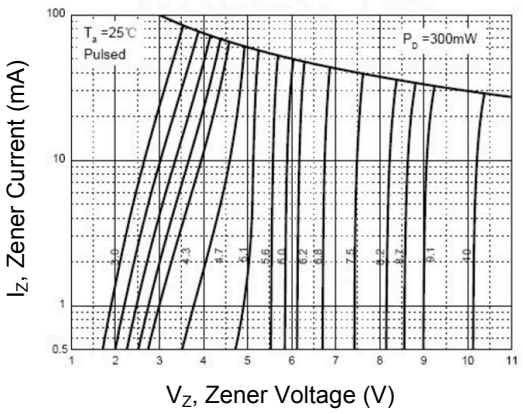


Figure 1. Zener Characteristics (V_Z Up to 10V)

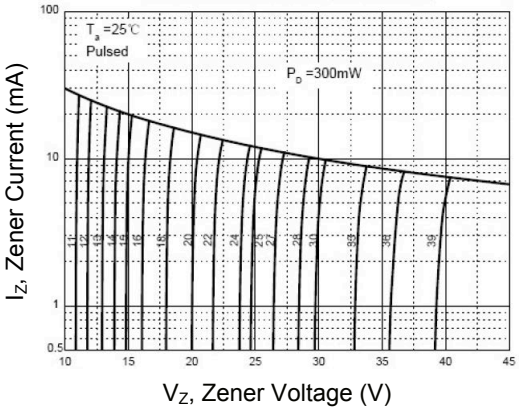


Figure 1. Zener Characteristics (11V to 39V)

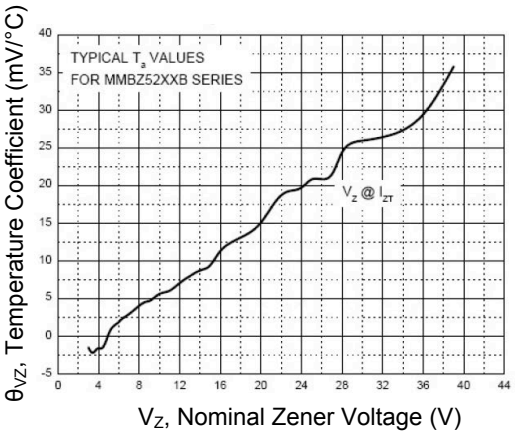


Figure 3. Temperature Coefficients

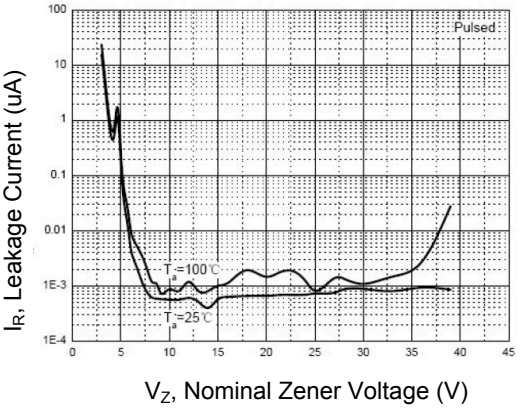


Figure 4. Typical Leakage Current

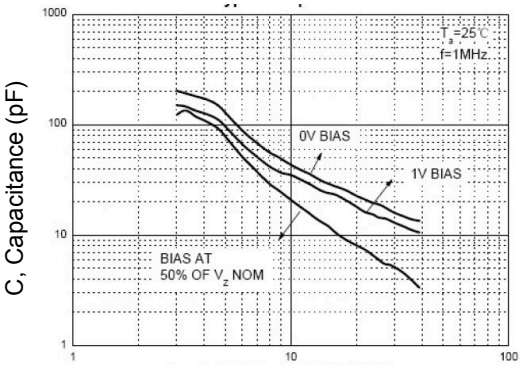


Figure 5. Typical Zener Breakdown

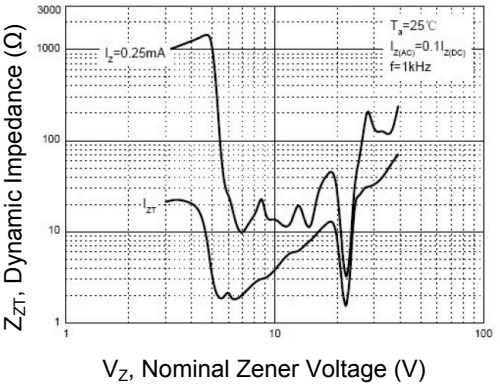


Figure 6. Effect of Zener Voltage on Zener Impedance

Typical Electrical Characteristic Curves

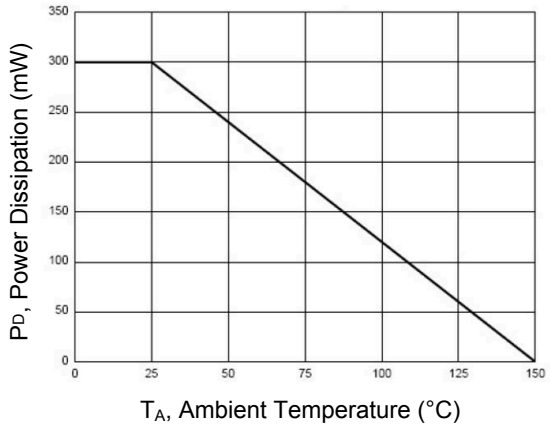
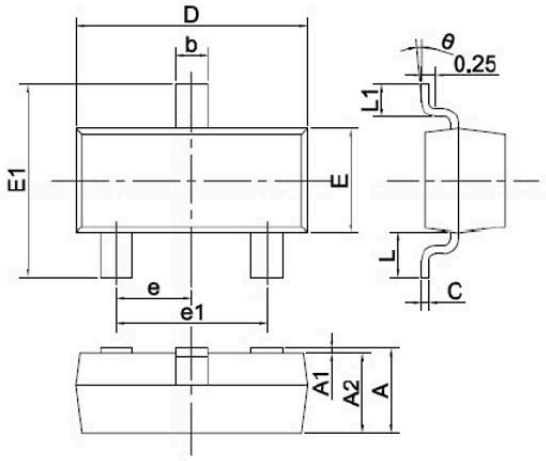


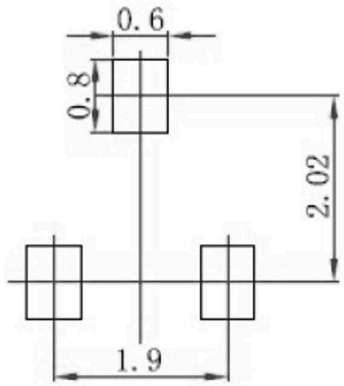
Figure 7. Power Derating Curve

Package Outline Dimensions (SOT-23)



Symbol	Dimensions in Millimeters	
	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	0.950 TYP.	
e1	1.800	2.000
L	0.550 REF.	
L1	0.300	0.500
θ	0°	8°

Recommended Pad Layout



Note:
1. Controlling dimensions: in millimeters.
2. General tolerance: 0.05mm.
3. The pad layout is for reference purposes only.