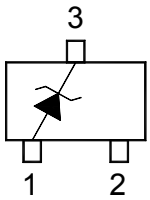
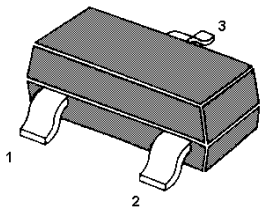
MMBZ5221B~MMBZ5261B

SILICON PLANAR ZENER DIODES

Low Voltage General Purpose Voltage Regulator Diodes





1 . ANODE 3. CATHODE

SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

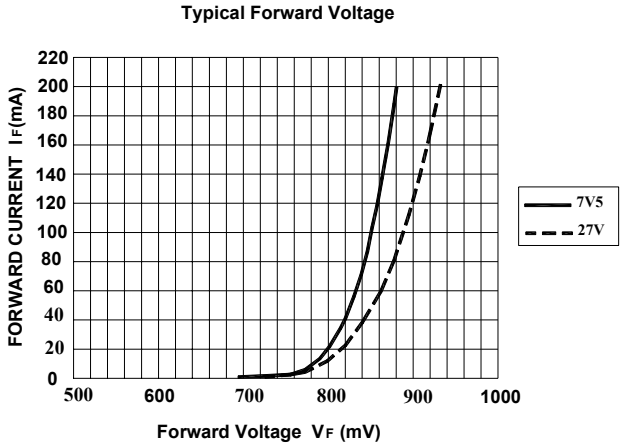
Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot} [1)]	300	mW
Power Dissipation	P_{tot} [2)]	225	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_S	- 55 to + 150	°C
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	417	°C/W

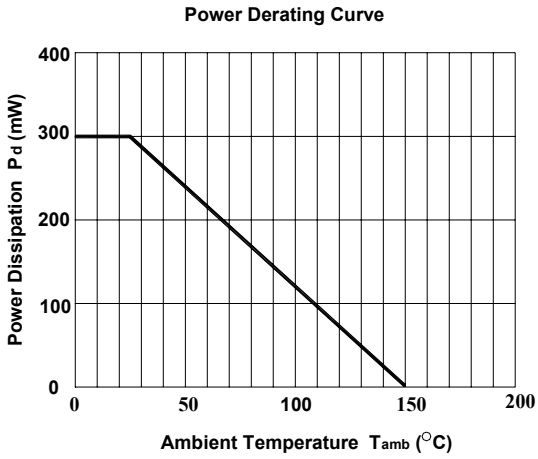
[1)] Device mounted on a ceramic alumina of 8 mm X 10 mm x 0.7 mm.
[2)] Device mounted on an FR5 printed-circuit board.

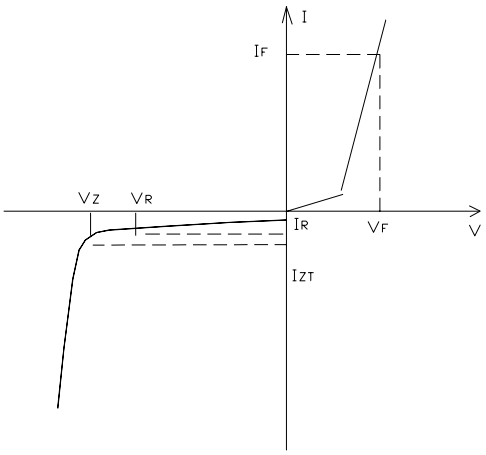
Characteristics at T_a = 25 °C

Type	Marking Code	Zener Voltage Range [1]			Z_{ZT} (Ω) max.	Z_{ZK} I_{ZK} = 0.25 mA (Ω) max.	I_R (μA) max.	@ V_R (V)
		V_{znom} V	I_{ZT} mA	V_{ZT} V				
MMBZ5221B	Y0	2.4	20	2.28…2.52	30	1200	100	1
MMBZ5223B	Z0	2.7	20	2.57…2.84	30	1300	75	1
MMBZ5225B	AA	3.0	20	2.85…3.15	30	1600	50	1
MMBZ5226B	AB	3.3	20	3.14…3.47	28	1600	25	1
MMBZ5227B	AC	3.6	20	3.42…3.78	24	1700	15	1
MMBZ5228B	AD	3.9	20	3.71…4.1	23	1900	10	1
MMBZ5229B	AE	4.3	20	4.09…4.52	22	2000	5	1
MMBZ5230B	AF	4.7	20	4.47…4.94	19	1900	5	2
MMBZ5231B	AH	5.1	20	4.85…5.36	17	1600	5	2
MMBZ5232B	AJ	5.6	20	5.32…5.88	11	1600	5	3
MMBZ5233B	AK	6	20	5.7…6.3	7	1600	5	3.5
MMBZ5234B	AM	6.2	20	5.89…6.51	7	1000	5	4
MMBZ5235B	AN	6.8	20	6.46…7.14	5	750	3	5
MMBZ5236B	AP	7.5	20	7.13…7.88	6	500	3	6
MMBZ5237B	AR	8.2	20	7.79…8.61	8	500	3	6.5
MMBZ5238B	AX	8.7	20	8.27…9.14	8	600	3	6.5
MMBZ5239B	AY	9.1	20	8.65…9.56	10	600	3	7
MMBZ5240B	AZ	10	20	9.5…10.5	17	600	3	8
MMBZ5241B	BA	11	20	10.45…11.55	22	600	2	8.4
MMBZ5242B	BB	12	20	11.4…12.6	30	600	1	9.1
MMBZ5243B	BC	13	9.5	12.35…13.65	13	600	0.5	9.9
MMBZ5245B	BE	15	8.5	14.25…15.75	16	600	0.1	11
MMBZ5246B	BF	16	7.8	15.2…16.8	17	600	0.1	12
MMBZ5247B	BH	17	7.4	16.15…17.85	19	600	0.1	13
MMBZ5248B	BJ	18	7	17.1…18.9	21	600	0.1	14
MMBZ5249B	BK	19	6.6	18.05…19.95	23	600	0.1	14
MMBZ5250B	BM	20	6.2	19…21	25	600	0.1	15
MMBZ5251B	BN	22	5.6	20.9…23.1	29	600	0.1	17
MMBZ5252B	BP	24	5.2	22.8…25.2	33	600	0.1	18
MMBZ5253B	BR	25	5	23.75…26.25	35	600	0.1	19
MMBZ5254B	BX	27	4.6	25.65…28.35	41	600	0.1	21
MMBZ5255B	BY	28	4.5	26.6…29.4	44	600	0.1	21
MMBZ5256B	BZ	30	4.2	28.5…31.5	49	600	0.1	23
MMBZ5257B	CA	33	3.8	31.35…34.65	58	700	0.1	25
MMBZ5258B	CB	36	3.4	34.2…37.8	70	700	0.1	27
MMBZ5259B	CC	39	3.2	37.05…40.95	80	800	0.1	30
MMBZ5260B	CD	43	3	40.85…45.15	93	800	0.1	33
MMBZ5261B	CE	47	2.7	44.65…49.35	105	1000	0.1	36

[1] Tested with pulses tp = 20 ms.







Zener Voltage Regulator