

Thermal Characteristics

Characteristic		Symbol	Value	Unit
Power Dissipation	(Note 6)	P_D	200	mW
Thermal Resistance, Junction to Ambient Air	(Note 6)	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Range		$T_{J_i}T_{STG}$	-65 to +150	°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

_		Zener Voltage Range (Note 7)			Maximum Zener Impedance (Note 8)		Maximum Reverse Leakage Current (Note 7)		
Type Number	Marking Code		Vz @ IzT		I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK @} I _{ZK} = 0.25mA	I _R	@ V R
		Nom (V)	Min (V)	Max (V)	mA	2	2	μA	V
MMBZ5221BTS	KSB	2.4	2.28	2.52	20	30	1200	100	1.0
MMBZ5223BTS	KSC	2.7	2.57	2.84	20	30	1300	75	1.0
MMBZ5225BTS	KSD	3.0	2.85	3.15	20	30	1600	50	1.0
MMBZ5226BTS	KSE	3.3	3.14	3.47	20	28	1600	25	1.0
MMBZ5227BTS	KSF	3.6	3.42	3.78	20	24	1700	15	1.0
MMBZ5228BTS	KSG	3.9	3.71	4.10	20	23	1900	10	1.0
MMBZ5229BTS	KSH	4.3	4.09	4.52	20	22	2000	5.0	1.0
MMBZ5230BTS	KS1	4.7	4.47	4.94	20	19	1900	5.0	2.0
MMBZ5231BTS	KS2	5.1	4.85	5.36	20	17	1600	5.0	2.0
MMBZ5232BTS	KS3	5.6	5.32	5.88	20	11	1600	5.0	3.0
MMBZ5233BTS	KRF	6.0	5.70	6.30	20	7	1600	5.0	3.5
MMBZ5234BTS	KS4	6.2	5.89	6.51	20	7	1000	5.0	4.0
MMBZ5235BTS	KS5	6.8	6.46	7.14	20	5	750	3.0	5.0
MMBZ5236BTS	KS6	7.5	7.13	7.88	20	6	500	3.0	6.0
MMBZ5237BTS	KS7	8.2	7.79	8.61	20	8	500	3.0	6.5
MMBZ5238BTS	KRG	8.7	8.27	9.14	20	8	600	3.0	6.5
MMBZ5239BTS	KS8	9.1	8.65	9.56	20	10	600	3.0	7.0
MMBZ5240BTS	KS9	10	9.50	10.50	20	17	600	3.0	8.0
MMBZ5241BTS	KR1	11	10.45	11.55	20	22	600	2.0	8.4
MMBZ5242BTS	KR2	12	11.40	12.60	20	30	600	1.0	9.1
MMBZ5243BTS	KR3	13	12.35	13.65	9.5	13	600	0.5	9.9
MMBZ5245BTS	KR4	15	14.25	15.75	8.5	16	600	0.1	11
MMBZ5246BTS	KR5	16	15.20	16.80	7.8	17	600	0.1	12
MMBZ5248BTS	KR6	18	17.10	18.90	7.0	21	600	0.1	14
MMBZ5250BTS	KR7	20	19.00	21.00	6.2	25	600	0.1	15
MMBZ5251BTS	KR8	22	20.90	23.10	5.6	29	600	0.1	17
MMBZ5254BTS	KRA	27	25.65	28.35	5.0	41	600	0.1	21
MMBZ5255BTS	KRH	28	26.60	29.40	4.5	44	600	0.1	21
MMBZ5256BTS	KRB	30	28.50	31.50	4.2	49	600	0.1	23
MMBZ5257BTS	KRC	33	31.35	34.65	3.8	58	700	0.1	25
MMBZ5258BTS	KRD	36	34.20	37.80	3.4	70	700	0.1	27
MMBZ5259BTS	KRE	39	37.05	40.95	3.2	80	800	0.1	30

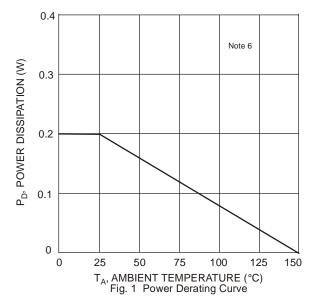
Notes:

^{6.} Mounted on FR4 PC Board with recommended pad layout which can be found on our website at http://www.diodes.com/package-outlines.html.

^{7.} Short duration pulse test used to minimize self-heating effect. 8. f = 1kHz.



MMBZ5221BTS - MMBZ5259BTS



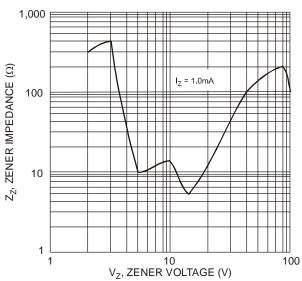


Fig. 3 Typical Zener Impedance Characteristics

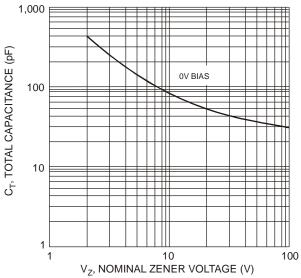


Fig. 2 Typical Total Capacitance vs. Nominal Zener Voltage

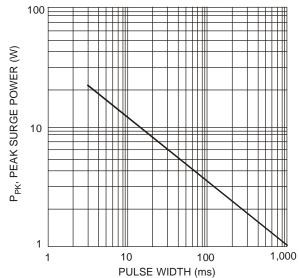


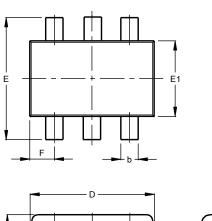
Fig. 4 Maximum Non-repetitive Surge Power

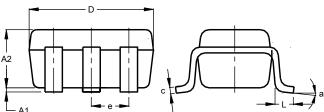


Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

SOT363



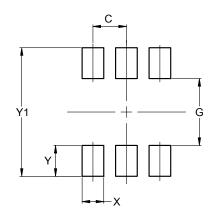


SOT363					
Dim	Min	Max	Тур		
A 1	0.00	0.10	0.05		
A2	0.90	1.00	0.95		
b	0.10	0.30	0.25		
C	0.10	0.22	0.11		
D	1.80	2.20	2.15		
Е	2.00	2.20	2.10		
E1	1.15	1.35	1.30		
е	0.650 BSC				
F	0.40	0.45	0.425		
L	0.25	0.40	0.30		
а	0°	8°			
All Dimensions in mm					

Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

SOT363



Dimensions	Value		
Dillielisions	(in mm)		
С	0.650		
G	1.300		
Х	0.420		
Υ	0.600		
Y1	2.500		



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5 of 5

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