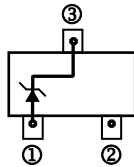


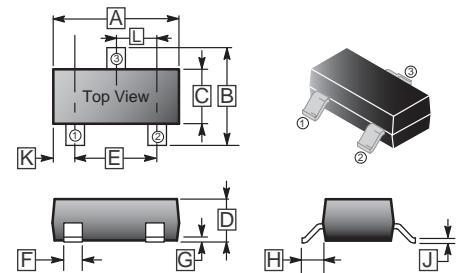
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Planar die construction
- 200mW power dissipation on FR-4 PCB
- General purpose, medium current
- Ideally suited for automated assembly



SOT-323



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.00	2.20	F	0.20	0.40
B	2.15	2.45	G	-	-
C	1.15	1.35	H	0.525	REF.
D	0.90	1.10	J	0.08	0.15
E	1.20	1.40			

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNITS
Forward Voltage @ I _F = 10mA	V _F	0.9	V
Power Dissipation	P _D	200	mW
Thermal Resistance, Junction to Ambient Air	R _{θJA}	625	°C / W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 ~ 150	°C

ELECTRICAL RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Type Number	Marking Code	Zener Voltage Range (Note 1)			Test Current	Maximum Zener Impedance (Notes 2)		Maximum Reverse Leakage Current (Note 1)	
		$V_Z @ I_{ZT}$				I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_R
		Nom (V)	Min (V)	Max (V)	mA	Ω		μA	V
MMBZ5221BW	KC1	2.4	2.28	2.52	20	30	1200	100	1.0
MMBZ5222BW	KC2	2.5	2.38	2.63	20	30	1250	100	1.0
MMBZ5223BW	KC3	2.7	2.57	2.84	20	30	1300	75	1.0
MMBZ5225BW	KC5	3.0	2.85	3.15	20	30	1600	50	1.0
MMBZ5226BW	KG1	3.3	3.14	3.47	20	28	1600	25	1.0
MMBZ5227BW	KG2	3.6	3.42	3.78	20	24	1700	15	1.0
MMBZ5228BW	KG3	3.9	3.71	4.10	20	23	1900	10	1.0
MMBZ5229BW	KG4	4.3	4.09	4.52	20	22	2000	5.0	1.0
MMBZ5230BW	KG5	4.7	4.47	4.94	20	19	1900	5.0	2.0
MMBZ5231BW	KE1	5.1	4.85	5.36	20	17	1600	5.0	2.0
MMBZ5232BW	KE2	5.6	5.32	5.88	20	11	1600	5.0	3.0
MMBZ5233BW	KE3	6.0	5.70	6.30	20	7	1600	5.0	3.5
MMBZ5234BW	KE4	6.2	5.89	6.51	20	7	1000	5.0	4.0
MMBZ5235BW	KE5	6.8	6.46	7.14	20	5	750	3.0	5.0
MMBZ5236BW	KF1	7.5	7.13	7.88	20	6	500	3.0	6.0
MMBZ5237BW	KF2	8.2	7.79	8.61	20	8	500	3.0	6.5
MMBZ5238BW	KF3	8.7	8.27	9.14	20	8	600	3.0	6.5
MMBZ5239BW	KF4	9.1	8.65	9.56	20	10	600	3.0	7.0
MMBZ5240BW	KF5	10	9.50	10.50	20	17	600	3.0	8.0
MMBZ5241BW	KH1	11	10.45	11.55	20	22	600	2.0	8.4
MMBZ5242BW	KH2	12	11.40	12.60	20	30	600	1.0	9.1
MMBZ5243BW	KH3	13	12.35	13.65	9.5	13	600	0.5	9.9
MMBZ5244BW	KH4	14	13.30	14.70	9.0	15	600	0.1	10
MMBZ5245BW	KH5	15	14.25	15.75	8.5	16	600	0.1	11
MMBZ5246BW	KJ1	16	15.20	16.80	7.8	17	600	0.1	12
MMBZ5247BW	KJ2	17	16.15	17.85	7.4	19	600	0.1	13
MMBZ5248BW	KJ3	18	17.10	18.90	7.0	21	600	0.1	14
MMBZ5249BW	KJ4	19	18.05	19.95	6.6	23	600	0.1	14
MMBZ5250BW	KJ5	20	19.00	21.00	6.2	25	600	0.1	15
MMBZ5251BW	KK1	22	20.90	23.10	5.6	29	600	0.1	17
MMBZ5252BW	KK2	24	22.80	25.20	5.2	33	600	0.1	18
MMBZ5253BW	KK3	25	23.75	26.25	5.0	35	600	0.1	19
MMBZ5254BW	KK4	27	25.65	28.35	5.0	41	600	0.1	21
MMBZ5255BW	KK5	28	26.60	29.40	4.5	44	600	0.1	21
MMBZ5256BW	KM1	30	28.50	31.50	4.2	49	600	0.1	23
MMBZ5257BW	KM2	33	31.35	34.65	3.8	58	700	0.1	25
MMBZ5258BW	KM3	36	34.20	37.80	3.4	70	700	0.1	27
MMBZ5259BW	KM4	39	37.05	40.95	3.2	80	800	0.1	30

Notes: 1. Short duration test pulse used to minimize self-heating effect.
2. $f = 1\text{KHz}$.

CHARACTERISTIC CURVES

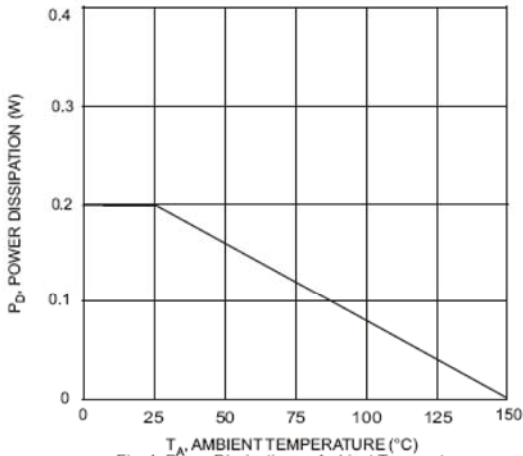


Fig. 1 Power Dissipation vs Ambient Temperature

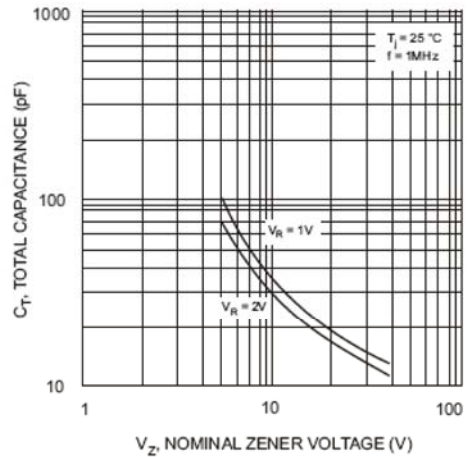


Fig. 2 Total Capacitance vs Nominal Zener Voltage

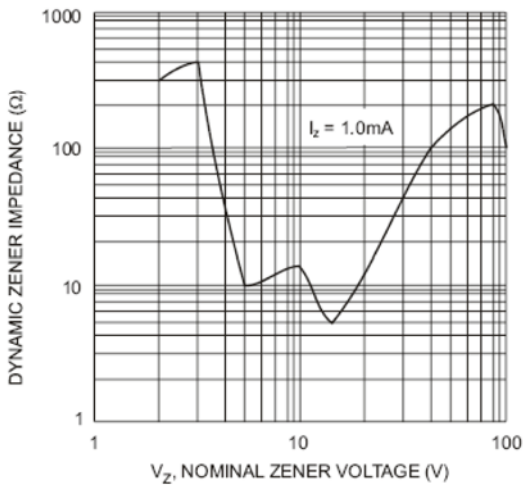


Fig. 3 Zener Voltage vs. Zener Impedance

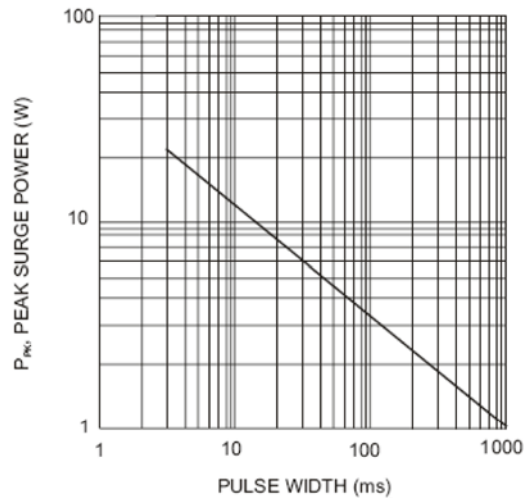


Fig. 4 Maximum Non-repetitive Surge Power

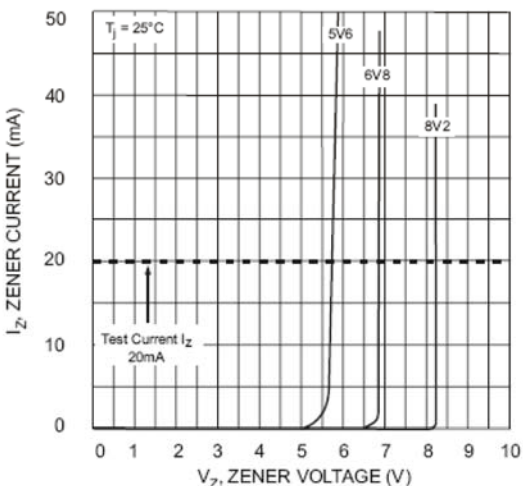


Fig. 5 Zener Breakdown Characteristics

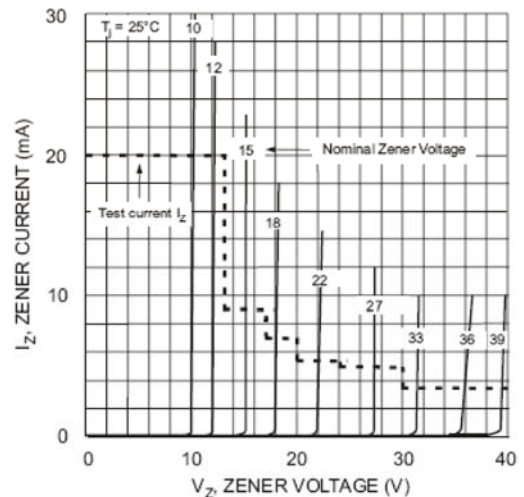


Fig. 6 Zener Breakdown Characteristics