

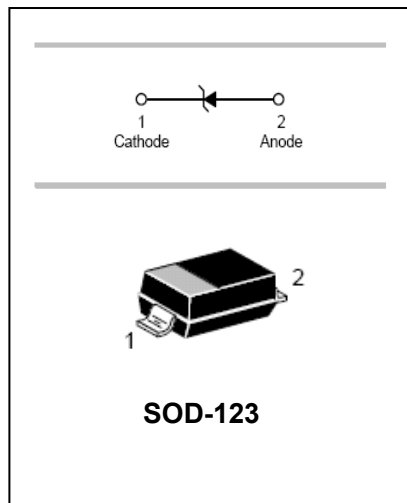


FEATURES

- Planar die construction.
- 500mW power dissipation.
- General purpose, medium current.
- Ideally suited for automated assembly processes.

APPLICATIONS

- Zener diode.
- Ultra-small surface mount package.



Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Rating	Unit
Power dissipation	P	500	mW
Thermal Resistance, Junction to Ambient Air	R _{θJA}	350	°C/W
Forward Voltage @ I _F = 10mA	V _F	0.9	V
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics (Ta = 25°C)

Type	Zener voltage V _Z (V)				Zener Impedance		Leakage Current		Marking
	Nom.	Min.	Max.	I _{ZT} (mA)	Z _{ZT} @ I _{ZT} (Ω)	Z _{ZK} @ I _{ZK} =0.25mA (Ω)	I _R (μA)	@ V _R (V)	
MMSZ5221B	2.4	2.28	2.52	20	30	1200	100	1	C1
MMSZ5222B	2.5	2.38	2.63	20	30	1250	100	1	C2
MMSZ5223B	2.7	2.57	2.84	20	30	1300	75	1	C3
MMSZ5224B	2.8	2.66	2.94	20	30	1400	75	1	C4
MMSZ5225B	3.0	2.85	3.15	20	29	1600	50	1	C5
MMSZ5226B	3.3	3.14	3.47	20	28	1600	25	1	D1
MMSZ5227B	3.6	3.42	3.78	20	24	1700	15	1	D2
MMSZ5228B	3.9	3.71	4.10	20	23	1900	10	1	D3
MMSZ5229B	4.3	4.09	4.52	20	22	2000	5	1	D4
MMSZ5230B	4.7	4.47	4.94	20	19	1900	5	2	D5
MMSZ5231B	5.1	4.85	5.36	20	17	1600	5	2	E1
MMSZ5232B	5.6	5.32	5.88	20	11	1600	5	3	E2



Type	Zener voltage V _Z (V)				Zener Impedance		Leakage Current		Marking
	Nom.	Min.	Max.	I _{ZT} (mA)	Z _{ZT} @ I _{ZT} (Ω)	Z _{ZK} @ I _{ZK} =0.25mA (Ω)	I _R (μA)	@ V _R (V)	
MMSZ5233B	6.0	5.70	6.30	20	7	1600	5	3.5	E3
MMSZ5234B	6.2	5.89	6.51	20	7	1000	5	4	E4
MMSZ5235B	6.8	6.46	7.14	20	5	750	3	5	E5
MMSZ5236B	7.5	7.13	7.88	20	6	500	3	6	F1
MMSZ5237B	8.2	7.79	8.61	20	8	500	3	6.5	F2
MMSZ5238B	8.7	8.27	9.14	20	8	600	3	6.5	F3
MMSZ5239B	9.1	8.65	9.56	20	10	600	3	7	F4
MMSZ5240B	10	9.50	10.50	20	17	600	3	8	F5
MMSZ5241B	11	10.45	11.55	20	22	600	2	8.4	H1
MMSZ5242B	12	11.40	12.60	20	30	600	1	9.1	H2
MMSZ5243B	13	12.35	13.65	9.5	13	600	0.5	9.9	H3
MMSZ5244B	14	13.30	14.70	9.0	15	600	0.1	10	H4
MMSZ5245B	15	14.25	15.75	8.5	16	600	0.1	11	H5
MMSZ5246B	16	15.20	16.80	7.8	17	600	0.1	12	J1
MMSZ5247B	17	16.15	17.85	7.4	19	600	0.1	13	J2
MMSZ5248B	18	17.10	18.90	7.0	21	600	0.1	14	J3
MMSZ5250B	20	19.00	21.00	6.2	25	600	0.1	15	J5
MMSZ5251B	22	20.90	23.10	5.6	29	600	0.1	17	K1
MMSZ5252B	24	22.80	25.20	5.2	33	600	0.1	18	K2
MMSZ5253B	25	23.75	26.25	5.0	35	600	0.1	19	K3
MMSZ5254B	27	25.65	28.35	4.6	41	600	0.1	21	K4
MMSZ5255B	28	26.60	29.40	4.5	44	600	0.1	21	K5
MMSZ5256B	30	28.50	31.50	4.2	49	600	0.1	23	M1
MMSZ5257B	33	31.35	34.65	3.8	58	700	0.1	25	M2
MMSZ5258B	36	34.20	37.80	3.4	70	700	0.1	27	M3
MMSZ5259B	39	37.05	40.95	3.2	80	800	0.1	30	M4
MMSZ5260B	43	40.85	45.15	3.0	93	900	0.1	33	M5
MMSZ5261B	47	44.65	49.35	2.7	105	1000	0.1	36	N1
MMSZ5262B	51	48.45	53.55	2.5	125	1100	0.1	39	N2
MMSZ5263B	56	53.20	58.80	2.2	150	1300	0.1	43	N3
MMSZ5264B	60	57.00	63.00	2.1	170	1400	0.1	46	N4
MMSZ5265B	62	58.90	65.10	2.0	185	1400	0.1	47	N5
MMSZ5266B	68	64.60	71.40	1.8	230	1600	0.1	52	P1
MMSZ5267B	75	71.25	78.75	1.7	270	1700	0.1	56	P2
MMSZ5268B	82	77.90	86.10	1.5	330	2000	0.1	62	P3
MMSZ5269B	87	82.65	91.35	1.4	370	2200	0.1	68	P4
MMSZ5270B	91	86.45	95.55	1.4	400	2300	0.1	69	P5
MMSZ5272B	110	104.45	115.5	1.1	750	3000	0.1	84	R2



TYPICAL CHARACTERISTICS @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

Breakdown characteristics

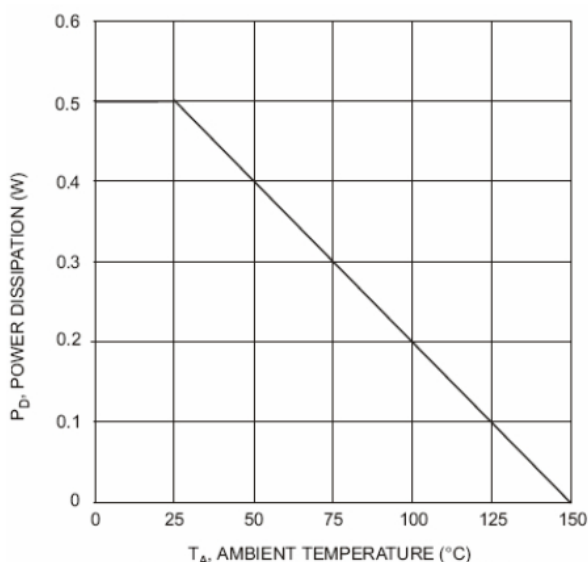
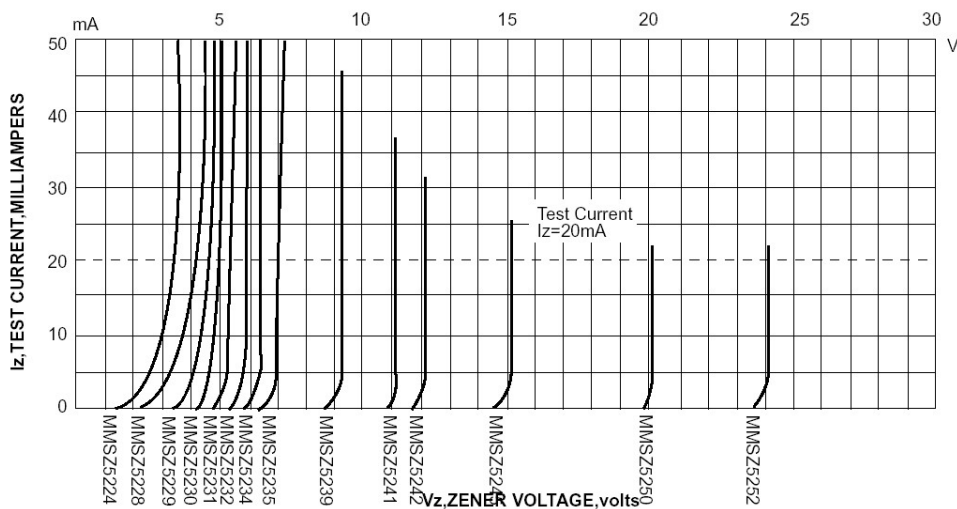


Fig. 1 Power Dissipation vs Ambient Temperature

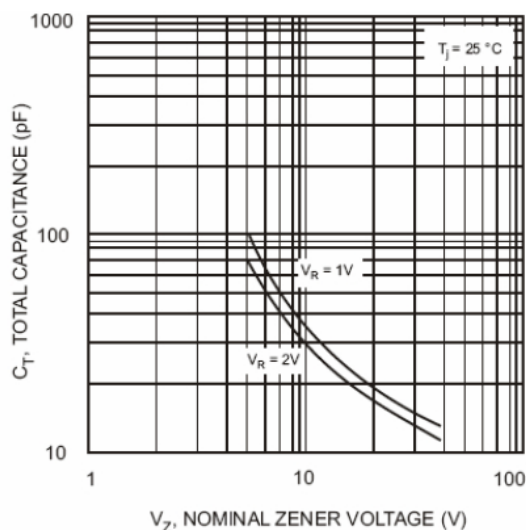


Fig. 2 Total Capacitance vs Nominal Zener Voltage

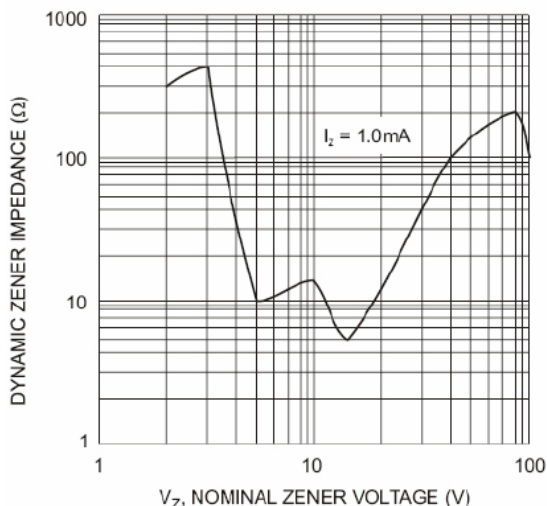


Fig. 3 Zener Voltage vs. Zener Impedance

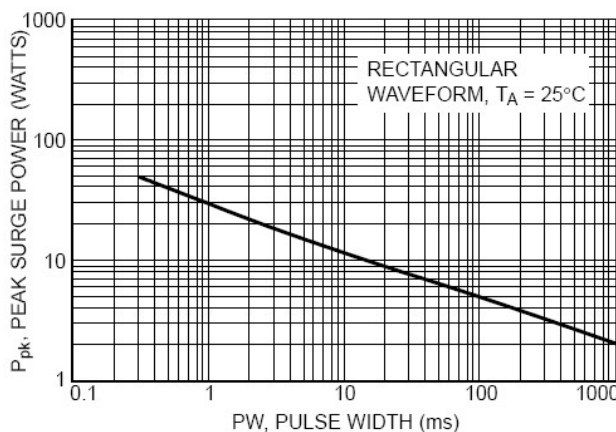


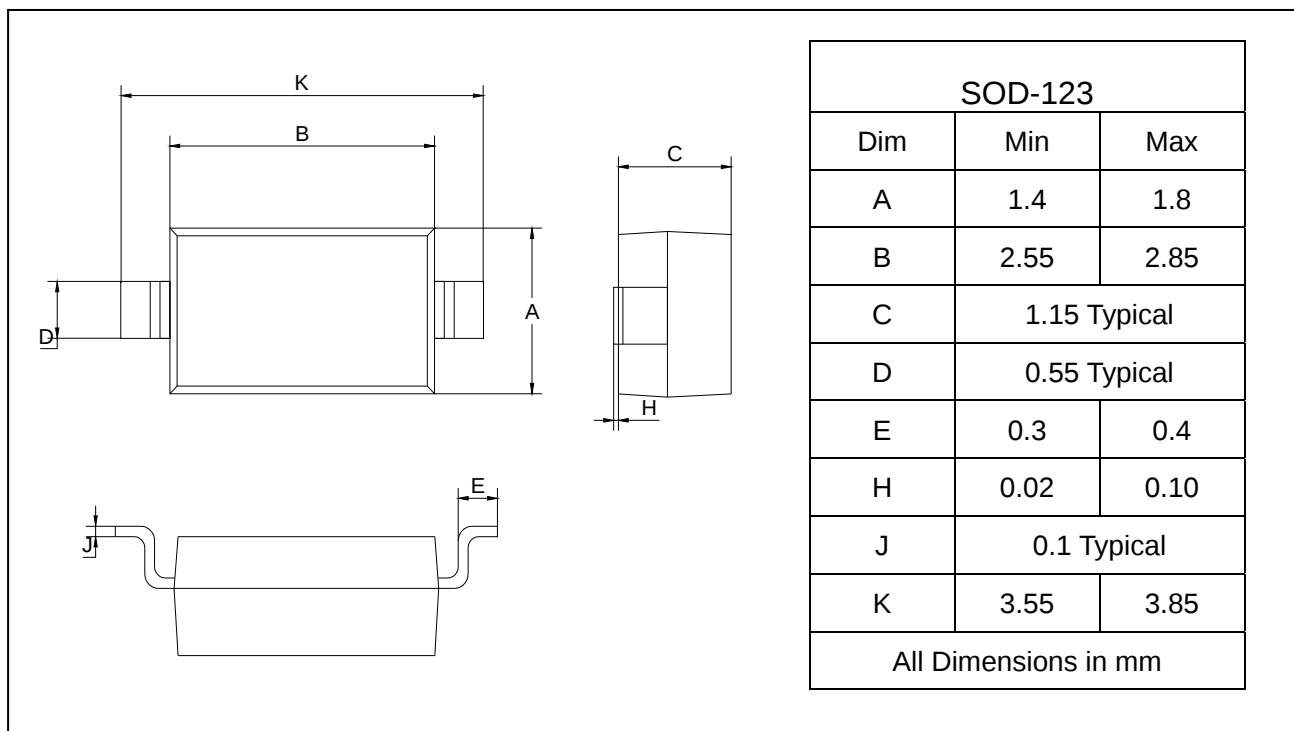
Fig. 4. Maximum Nonrepetitive Surge Power



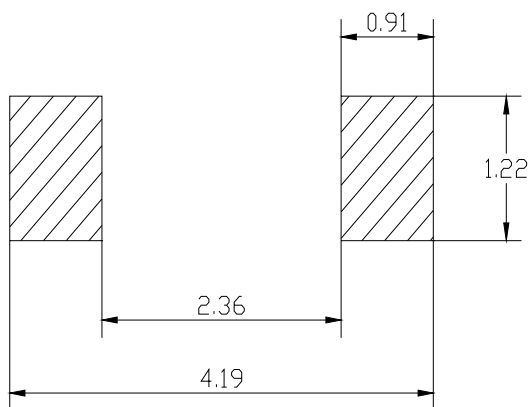
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



Unit: mm

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOD-123	3000/REEL	90000	40X20X22	5.00	4.00