

SOD-123 Plastic-Encapsulate Diodes

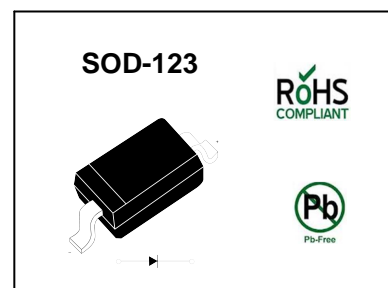
ZENER DIODE

FEATURES

- Planar Die Construction
- Ultra-Small Surface Mount Package
- General purpose, Medium Current
- Ideally Suited for Automated Assembly Processes

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



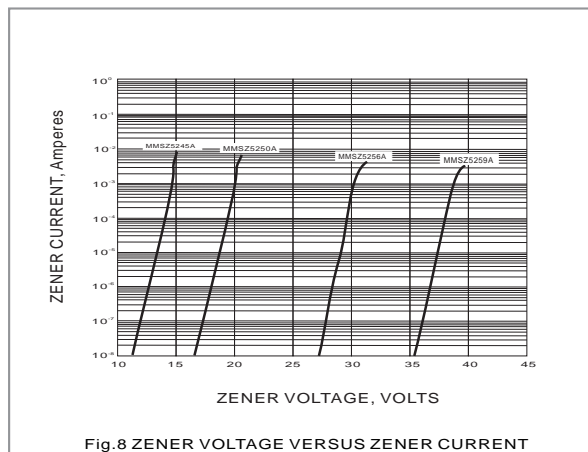
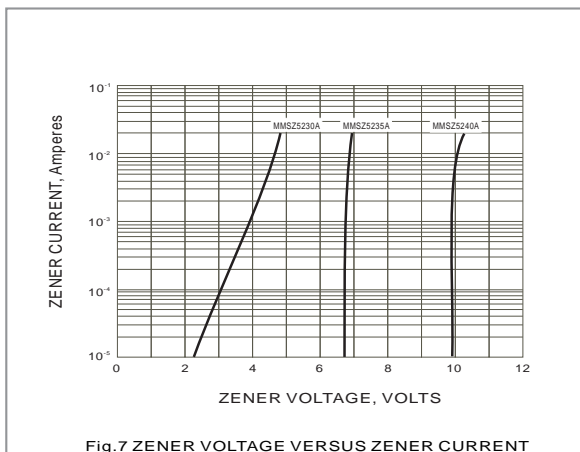
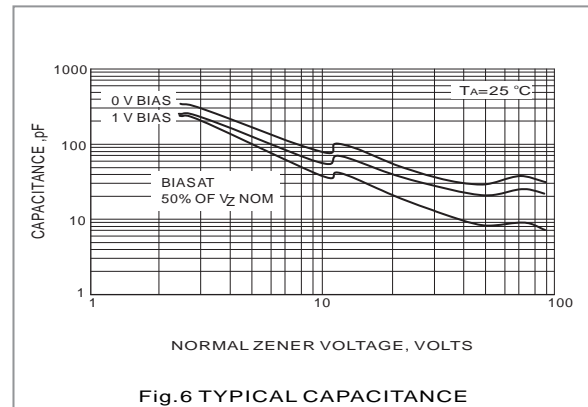
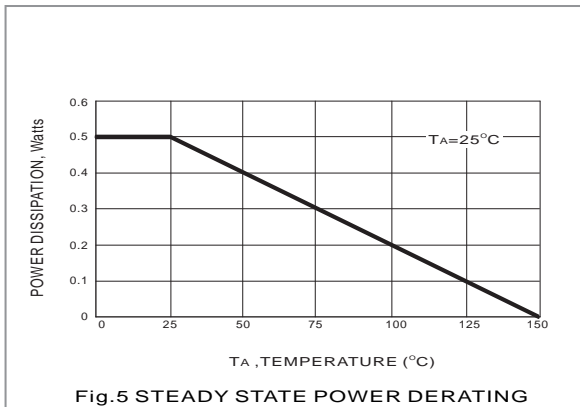
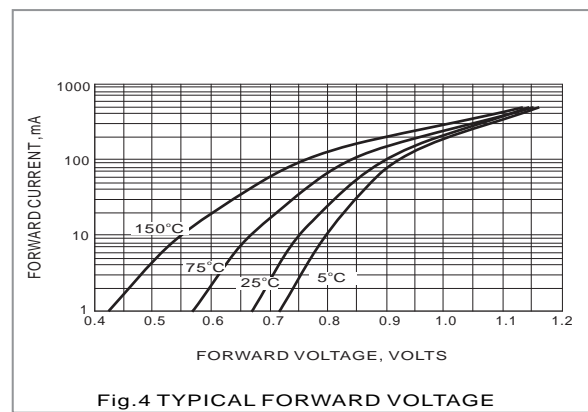
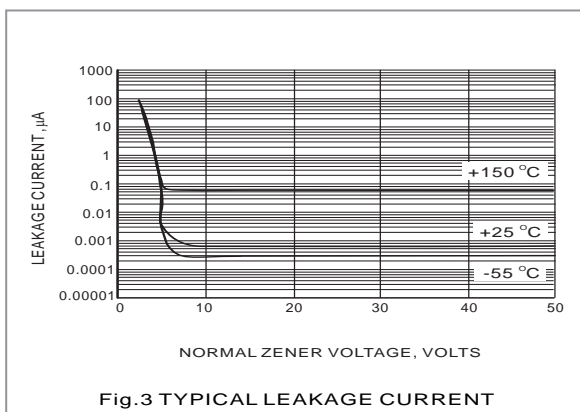
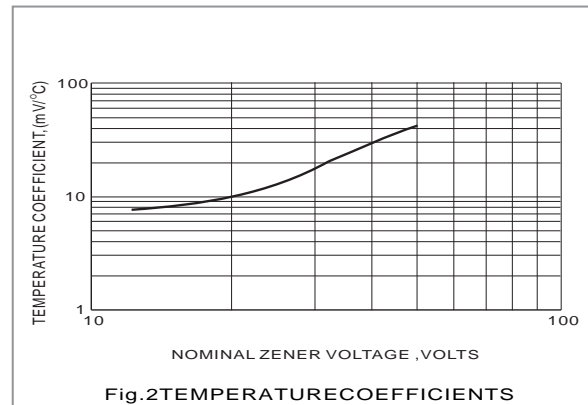
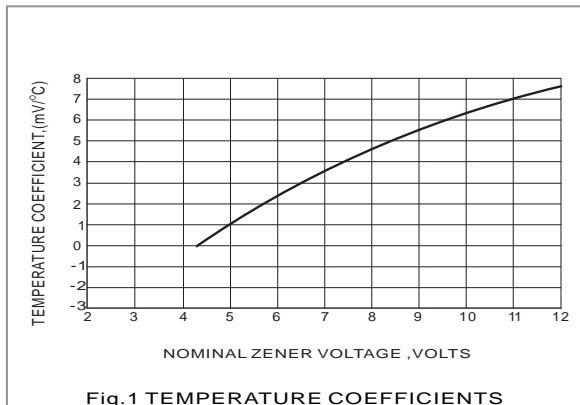
Maximum Ratings($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Characteristic	Symbol	Value	Unit
Forward Voltage (Note 2) @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation(Note 1)	P_d	500	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	357	$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-50~ +150	$^{\circ}\text{C}$

Notes:1. Device mounted on ceramic PCB; 7.6 mm x 9.4 mm x 0.87 mm with pad areas 25 mm².

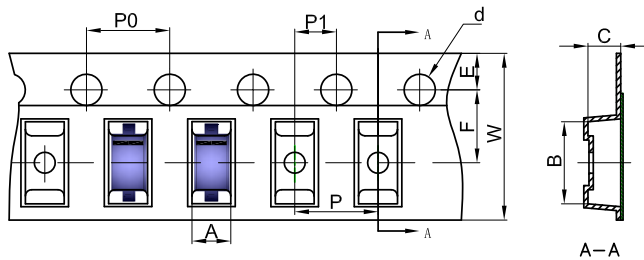
2. Tested with pulses, $T_p \leq 1.0\text{ms}$.

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
500 mWatts Zener Diodes										
MMSZ5229A	4.3	4.21	4.39	22	20.0	2000	0.25	5.0	1.0	D4
MMSZ5230A	4.7	4.61	4.79	19	20.0	1900	0.25	5.0	2.0	D5
MMSZ5231A	5.1	5.00	5.20	17	20.0	1600	0.25	5.0	2.0	E1
MMSZ5232A	5.6	5.49	5.71	11	20.0	1600	0.25	5.0	3.0	E2
MMSZ5234A	6.2	6.08	6.32	7	20.0	1000	0.25	5.0	4.0	E4
MMSZ5235A	6.8	6.66	6.94	5	20.0	750	0.25	3.0	5.0	E5
MMSZ5236A	7.5	7.35	7.65	6	20.0	500	0.25	3.0	6.0	F1
MMSZ5237A	8.2	8.04	8.36	8	20.0	500	0.25	3.0	6.0	F2
MMSZ5238A	8.7	8.53	8.87	8	20	600	0.25	3.0	6.5	F3
MMSZ5239A	9.1	8.92	9.28	10	20.0	600	0.25	3.0	6.5	F4
MMSZ5240A	10	9.80	10.20	17	20.0	600	0.25	3.0	8.0	F5
MMSZ5241A	11	10.78	11.22	22	20.0	600	0.25	3.0	8.4	H1
MMSZ5242A	12	11.76	12.24	30	20.0	600	0.25	2.0	9.1	H2
MMSZ5243A	13	12.74	13.26	13	9.5	600	0.25	1.0	9.9	H3
MMSZ5244A	14	13.72	14.28	15	9.0	600	0.25	0.5	10.5	H4
MMSZ5245A	15	14.70	15.30	16	8.5	600	0.25	0.5	11.0	H5
MMSZ5246A	16	15.68	16.32	17	7.8	600	0.25	0.1	12.0	J1
MMSZ5247A	17	16.66	17.34	19	7.5	600	0.25	0.1	13.0	J2
MMSZ5248A	18	17.64	18.36	21	7.0	600	0.25	0.1	14.0	J3
MMSZ5250A	20	19.60	20.40	25	6.2	600	0.25	0.1	15.0	J5
MMSZ5251A	22	21.56	22.44	29	5.6	600	0.25	0.1	17.0	K1
MMSZ5252A	24	23.52	24.48	33	5.2	600	0.25	0.1	18.0	K2
MMSZ5254A	27	26.46	27.54	41	5.0	600	0.25	0.1	21.0	K4
MMSZ5255A	28	27.44	28.56	44	4.5	600	0.25	0.1	21.0	K5
MMSZ5256A	30	29.40	30.60	49	4.2	600	0.25	0.1	23.0	M1
MMSZ5257A	33	32.34	33.66	58	3.8	700	0.25	0.1	25.0	M2
MMSZ5258A	36	35.28	36.72	70	3.4	700	0.25	0.1	27.0	M3
MMSZ5259A	39	38.22	39.78	80	3.2	800	0.25	0.1	30.0	M4
MMSZ5260A	43	42.14	43.86	93	3.0	900	0.25	0.1	33.0	M5
MMSZ5261A	47	46.06	47.94	105	2.7	1000	0.25	0.1	36.0	N1
MMSZ5262A	51	49.98	52.02	125	2.5	1100	0.25	0.1	39.0	N2



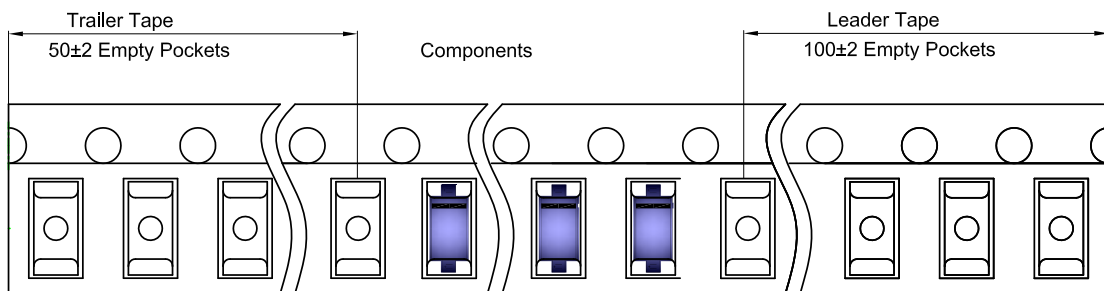
SOD-123 Tape and Reel

SOD-123 Embossed Carrier Tape

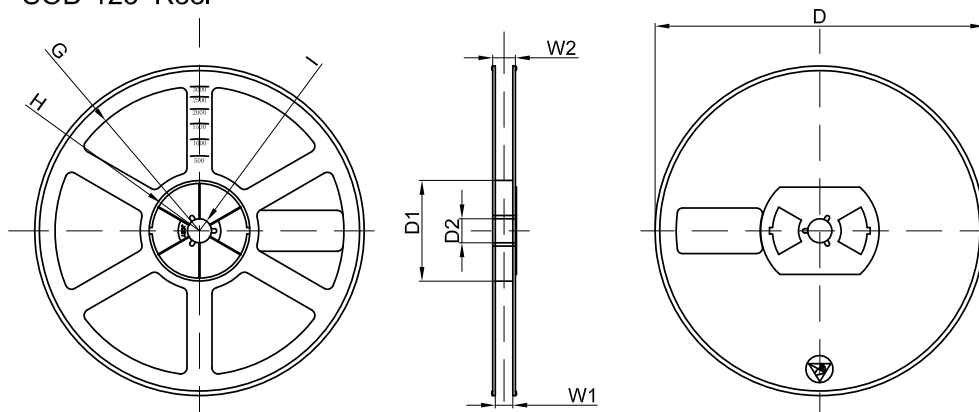


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-123	1.85	3.95	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

SOD-123 Tape Leader and Trailer

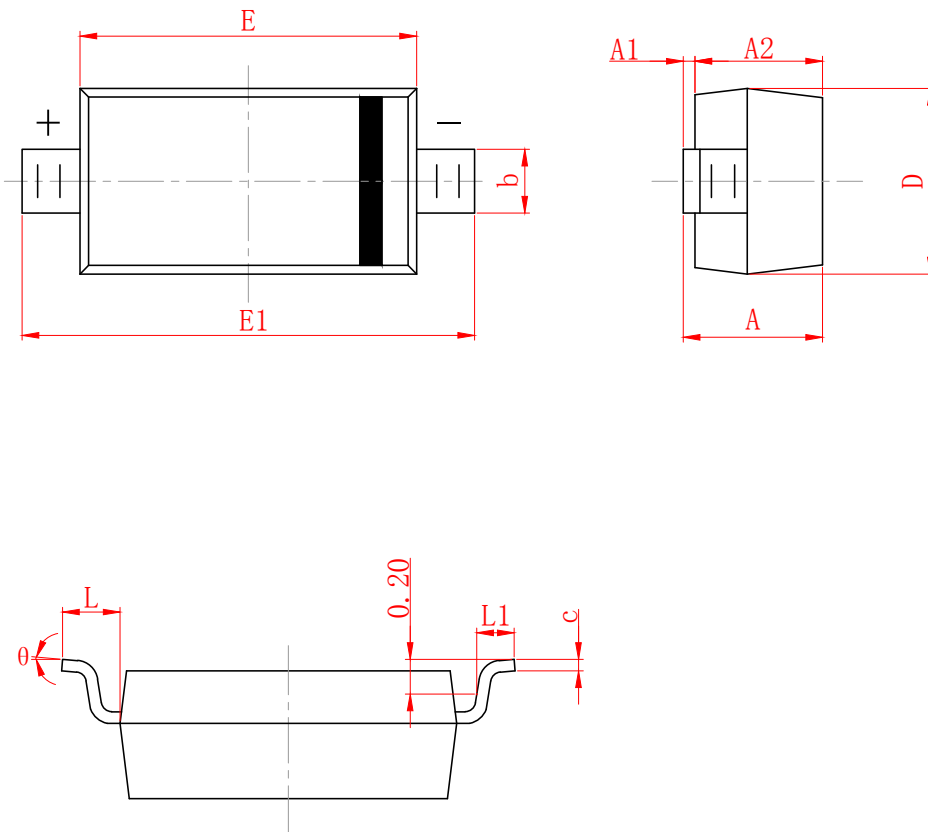


SOD-123 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	



SYMBOL	MILLIMETER	
	MIN	MAX
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.008	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500 (REF)	
L1	0.250	0.450
θ	0°	8°

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