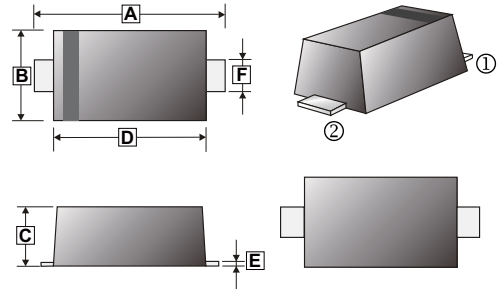


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Wide Zener Voltage Range Selection, 4.3V to 75V
- V_Z Tolerance Selection of $\pm 2\%$
- Flat Lead SOD-123LH Plastic Package
- Surface Device Type Mounting
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

SOD-123LH



PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123LH	3K	7 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.30	3.70	D	2.50	2.70
B	1.50	1.70	E	0.05	0.20
C	0.80	1.00	F	0.50	0.70



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

Parameter	Symbol	Rating	Unit
Power Dissipation	P_D	500	mW
Operating and Storage Temperature Range	T_J, T_{STG}	-65~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified, $V_F=900\text{mV}$ Maximum @ $I_F=10\text{mA}$)

Type Number	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Leakage Current	
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	I_{ZK}	$I_R@V_R$	
		Min(V)	Nom(V)	Max(V)	mA	Ω	Ω	mA	μA	V
MTSZ5229CW	229C	4.214	4.3	4.386	20	22	2000	0.25	5	1
MTSZ5230CW	230C	4.606	4.7	4.794	20	19	1900	0.25	5	2
MTSZ5231CW	231C	4.998	5.1	5.202	20	17	1600	0.25	5	2
MTSZ5232CW	232C	5.488	5.6	5.712	20	11	1600	0.25	5	3
MTSZ5233CW	233C	5.88	6	6.12	20	7	1600	0.25	5	3.5
MTSZ5234CW	234C	6.076	6.2	6.324	20	7	1000	0.25	5	4
MTSZ5235CW	235C	6.664	6.8	6.936	20	5	750	0.25	3	5
MTSZ5236CW	236C	7.35	7.5	7.65	20	6	500	0.25	3	6
MTSZ5237CW	237C	8.036	8.2	8.364	20	8	500	0.25	3	6.5
MTSZ5238CW	238C	8.526	8.7	8.874	20	8	600	0.25	3	6.5
MTSZ5239CW	239C	8.918	9.1	9.282	20	10	600	0.25	3	7
MTSZ5240CW	240C	9.8	10	10.2	20	17	600	0.25	3	8
MTSZ5241CW	241C	10.78	11	11.22	20	22	600	0.25	2	8.4
MTSZ5242CW	242C	11.76	12	12.24	20	30	600	0.25	1	9.1
MTSZ5243CW	243C	12.74	13	13.26	9.5	13	600	0.25	0.5	9.9
MTSZ5244CW	244C	13.72	14	14.28	9	15	600	0.25	0.1	10
MTSZ5245CW	245C	14.7	15	15.3	8.5	16	600	0.25	0.1	11
MTSZ5246CW	246C	15.68	16	16.32	7.8	17	600	0.25	0.1	12
MTSZ5247CW	247C	16.66	17	17.34	7.4	19	600	0.25	0.1	13
MTSZ5248CW	248C	17.64	18	18.36	7	21	600	0.25	0.1	14
MTSZ5249CW	249C	18.62	19	19.38	6.6	23	600	0.25	0.1	14
MTSZ5250CW	250C	19.6	20	20.4	6.2	25	600	0.25	0.1	15
MTSZ5251CW	251C	21.56	22	22.44	5.6	29	600	0.25	0.1	17
MTSZ5252CW	252C	23.52	24	24.48	5.2	33	600	0.25	0.1	18
MTSZ5253CW	253C	24.5	25	25.5	5	35	600	0.25	0.1	19
MTSZ5254CW	254C	26.46	27	27.54	4.6	41	600	0.25	0.1	21
MTSZ5255CW	255C	27.44	28	28.56	4.5	44	600	0.25	0.1	21
MTSZ5256CW	256C	29.4	30	30.6	4.2	49	600	0.25	0.1	23
MTSZ5257CW	257C	32.34	33	33.66	3.8	58	700	0.25	0.1	25
MTSZ5258CW	258C	35.28	36	36.72	3.4	70	700	0.25	0.1	27

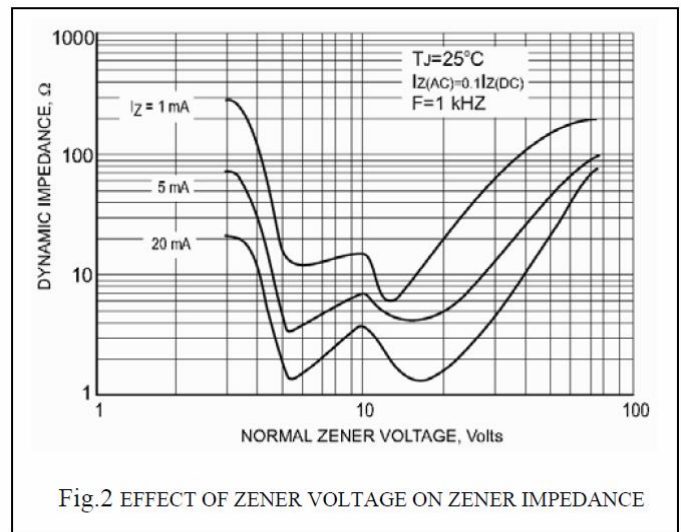
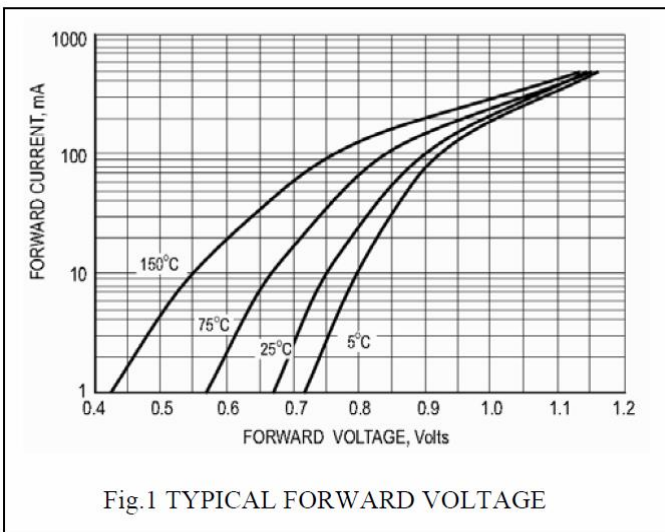
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified, $V_F=900\text{mV}$ Maximum @ $I_F=10\text{mA}$)

Type Number	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Leakage Current	
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	I_{ZK}	$I_R@V_R$	
		Min(V)	Nom(V)	Max(V)	mA	Ω	Ω	mA	μA	V
MTSZ5259CW	259C	38.22	39	39.78	3.2	80	800	0.25	0.1	30
MTSZ5260CW	260C	42.14	43	43.86	3	93	900	0.25	0.1	33
MTSZ5261CW	261C	46.06	47	47.94	2.7	105	1000	0.25	0.1	36
MTSZ5262CW	262C	49.98	51	52.02	2.5	125	1100	0.25	0.1	39
MTSZ5263CW	263C	54.88	56	57.12	2.2	150	1300	0.25	0.1	43
MTSZ5264CW	264C	58.8	60	61.2	2.1	170	1400	0.25	0.1	46
MTSZ5265CW	265C	60.76	62	63.24	2	185	1400	0.25	0.1	47
MTSZ5266CW	266C	66.64	68	69.36	1.8	230	1600	0.25	0.1	52
MTSZ5267CW	267C	73.5	75	76.5	1.7	270	1700	0.25	0.1	56

Notes:

1. The zener voltage (V_Z) is tested under pulse condition of 1mS.
2. The device numbers listed have a standard tolerance on the nominal zener voltage of $\pm 2\%$.
3. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK} .

CHARACTERISTIC CURVES



CHARACTERISTIC CURVES

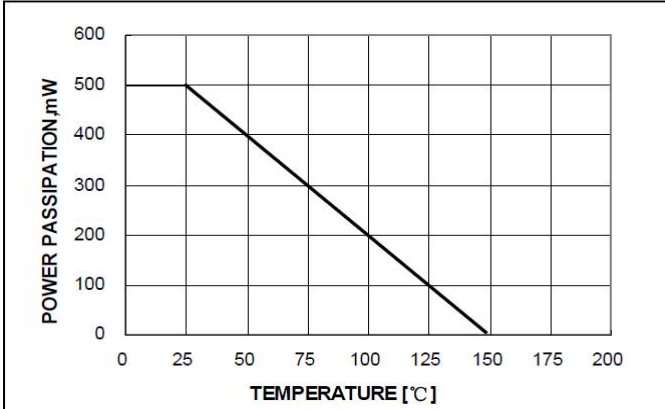


Fig.3 POWER DISSIPATION VS. AMBIENT TEMP.

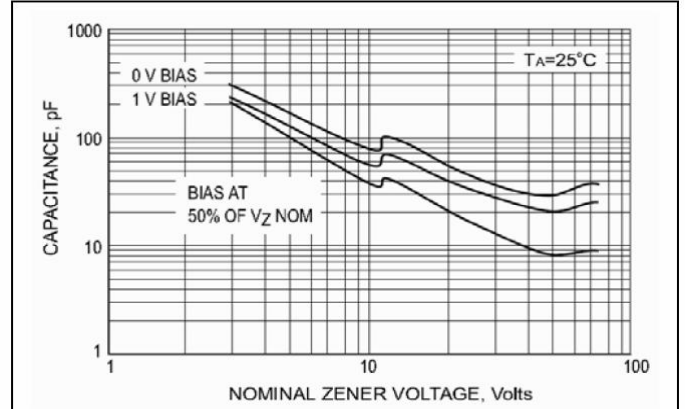


Fig.4 TYPICAL CAPACITANCE

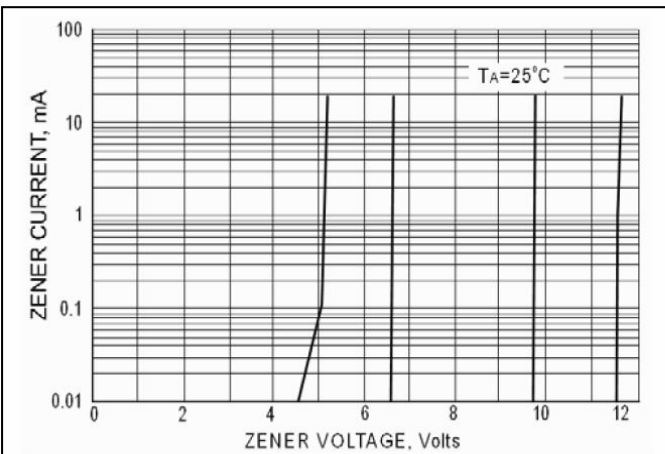


Fig.5 ZENER BREAKDOWN CHARACTERISTICS

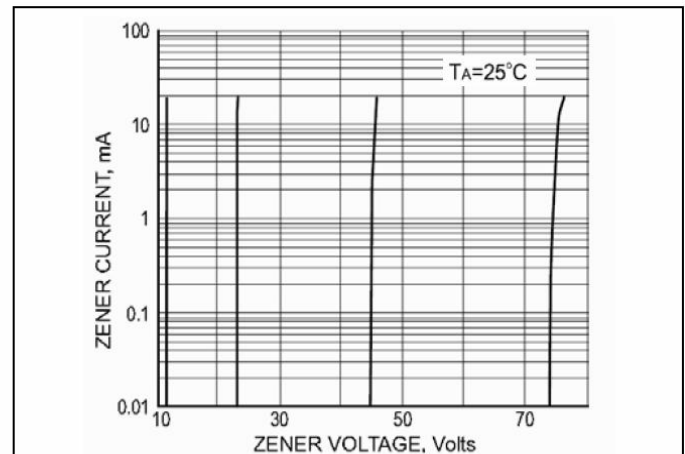


Fig.6 ZENER BREAKDOWN CHARACTERISTICS

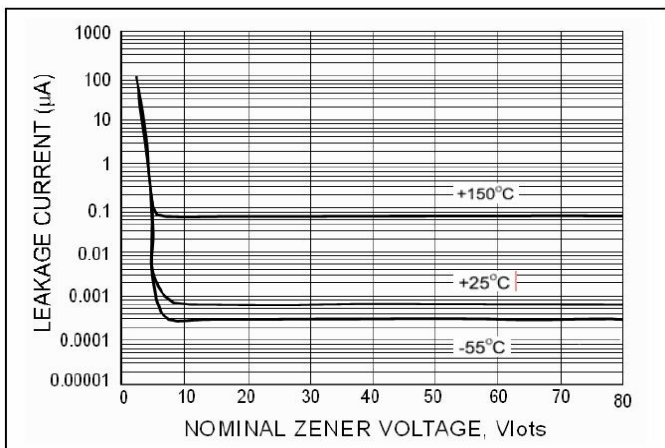


Fig.7 TYPICAL LEAKGE CURRENT