

## Features

- ESD Rating of Class 3 (>16 kV) per Human Body Model
- Ultra-Small Surface Mount Package
- General Purpose, Medium Current



Package: SOD-123



**RoHS**  
COMPLIANT

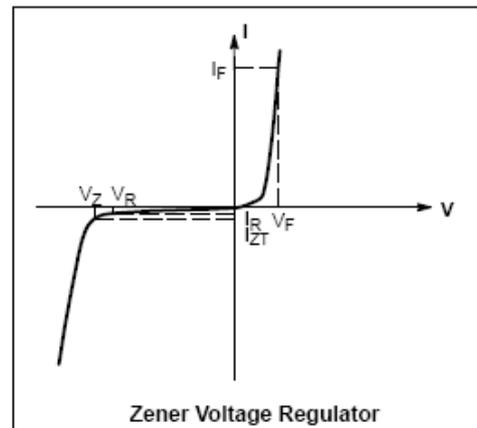
## Absolute Maximum Ratings

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

Characteristic	Symbol	Value	Unit
Forward Voltage @ $I_F=10\text{mA}$	$V_F$	0.9	V
Power Dissipation	$P_D$	350	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	357	$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150	$^{\circ}\text{C}$

Notes: Device mounted on ceramic PCB;5.0mm×7.0mm with pad areas 35 mm<sup>2</sup>

symbol	Parameter
$V_Z$	Reverse zener voltage @ $I_{ZT}$
$I_{ZT}$	Reverse current
$I_R$	Reverse leakage current @ $V_R$
$V_R$	Reverse voltage
$I_F$	Forward current
$V_F$	Forward voltage @ $I_F$



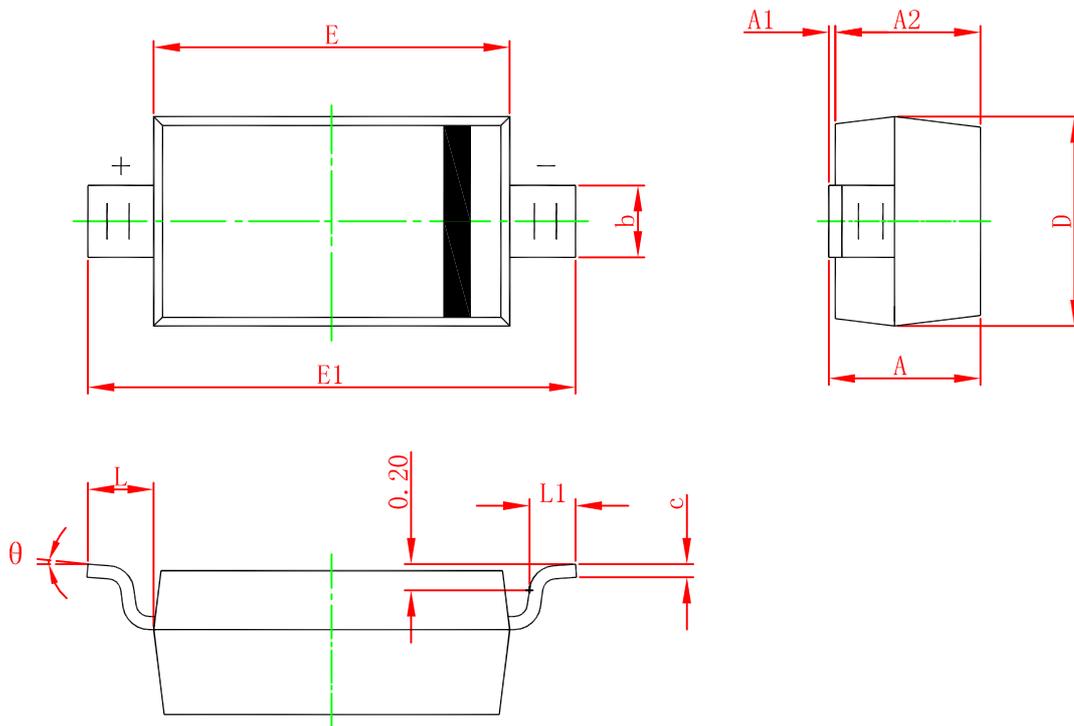
## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

MPN	Device Marking	Zener Voltage (Note 1)				Leakage Current	
		VZ (V)			@ IZT	IR @ VR	
		Min	Nom	Max	µA	µA	V
SMSZ4678	CC	1.71	1.8	1.89	50	7.5	1
SMSZ4679	CD	1.90	2.0	2.10	50	5	1
SMSZ4680	CE	2.09	2.2	2.31	50	4	1
SMSZ4681	CF	2.28	2.4	2.52	50	2	1
SMSZ4682	CH	2.565	2.7	2.835	50	1	1
SMSZ4683	CJ	2.85	3.0	3.15	50	0.8	1
SMSZ4684	CK	3.13	3.3	3.47	50	7.5	1.5
SMSZ4685	CM	3.42	3.6	3.78	50	7.5	2
SMSZ4686	CN	3.70	3.9	4.10	50	5	2
SMSZ4687	CP	4.09	4.3	4.52	50	4	2
SMSZ4688	CT	4.47	4.7	4.94	50	10	3
SMSZ4689	CU	4.85	5.1	5.36	50	10	3
SMSZ4690	CV	5.32	5.6	5.88	50	10	4
SMSZ4691	CA	5.89	6.2	6.51	50	10	5
SMSZ4692	CX	6.46	6.8	7.14	50	10	5.1
SMSZ4693	CY	7.13	7.5	7.88	50	10	5.7
SMSZ4694	CZ	7.79	8.2	8.61	50	1	6.2
SMSZ4695	DC	8.27	8.7	9.14	50	1	6.6
SMSZ4696	DD	8.65	9.1	9.56	50	1	6.9
SMSZ4697	DE	9.50	10	10.50	50	1	7.6
SMSZ4698	DF	10.45	11	11.55	50	0.05	8.4
SMSZ4699	DH	11.40	12	12.60	50	0.05	9.1
SMSZ4700	DJ	12.35	13	13.65	50	0.05	9.8
SMSZ4701	DK	13.30	14	14.70	50	0.05	10.6
SMSZ4702	DM	14.25	15	15.75	50	0.05	11.4
SMSZ4703	DN	15.20	16	16.80	50	0.05	12.1
SMSZ4704	DP	16.15	17	17.85	50	0.05	12.9
SMSZ4705	DT	17.10	18	18.90	50	0.05	13.6
SMSZ4706	DU	18.05	19	19.95	50	0.05	14.4
SMSZ4707	DV	19.00	20	21.00	50	0.01	15.2
SMSZ4708	DA	20.90	22	23.10	50	0.01	16.7
SMSZ4709	DX	22.80	24	25.20	50	0.01	18.2
SMSZ4710	DY	23.75	25	26.25	50	0.01	19.0
SMSZ4711	EA	25.65	27	28.35	50	0.01	20.4
SMSZ4712	EC	26.60	28	29.40	50	0.01	21.2
SMSZ4713	ED	28.50	30	31.50	50	0.01	22.8
SMSZ4714	EE	31.35	33	34.65	50	0.01	25.0
SMSZ4715	EF	34.20	36	37.80	50	0.01	27.3
SMSZ4716	EH	37.05	39	40.95	50	0.01	29.6
SMSZ4717	EJ	40.85	43	45.15	50	0.01	32.6

**Note:** 1. Nominal Zener voltage is measured with the device junction in thermal equilibrium at TL = 30°C ±1°C.

## Package Outline Dimensions

### SOD-123



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF.		0.020 REF.	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°