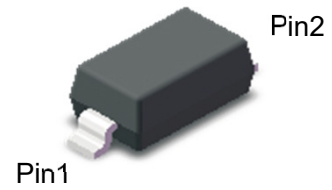


Feature

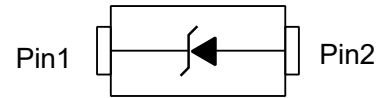
- Total power dissipation: Max. 500mW.
- Wide zener reverse voltage range 2.0V to 75V.
- Small plastic package suitable for surface mounted design.
- Tolerance approximately $\pm 5\%$



SOD-123(Top View)

Mechanical Characteristics

- Case: SOD-123
- Terminals: Solderable per MIL-STD-750, Method 2026



Circuit Diagram

Electrical characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Units
Power Dissipation	P_d	500	mW
Forward Voltage @ $I_F=10\text{mA}$	V_F	0.9	V
Typical Thermal Resistance Juncting To Ambient ¹⁾	$R_{\theta JA}$	340	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^\circ\text{C}$

Notes:

- 1) Thermal resistance from junction to ambient at P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper areas pads.

Typical Characteristics

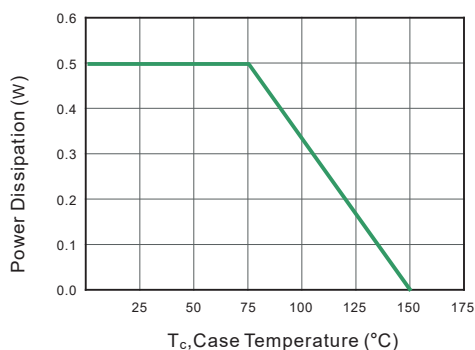


Fig.1 Maximum Continuous Power Derating

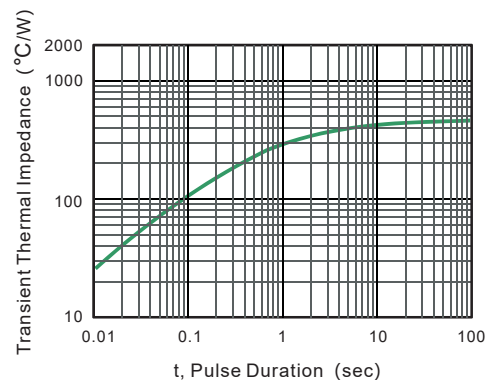


Fig.2 Typical Transient Thermal Impedance

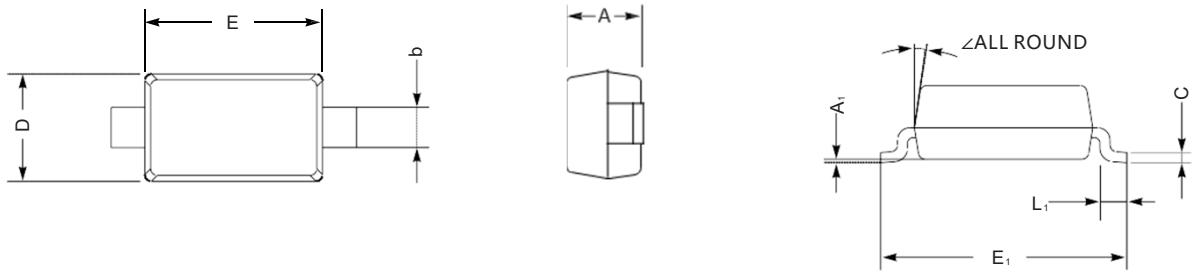
Zener Voltage Regulators

Maximum Ratings and Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

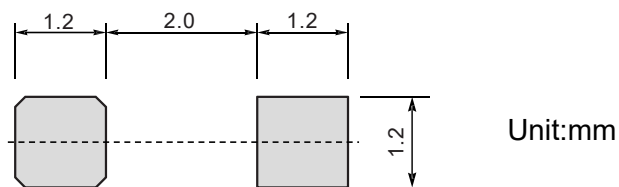
Device	Zener Voltage Range			I_{ZT} (mA)	Dynamic Impedance Z_{ZT} Max(Ω)	Reverse Current	
	V_Z					I_r	V_R
	Min(V)	Nom(V)	Max(V)			Max(μA)	V
PZ1D2V0H	1.8	2.0	2.15	5	100	120	0.5
PZ1D2V2H	2.08	2.2	2.33	5	100	120	0.7
PZ1D2V4H	2.28	2.4	2.56	5	100	120	1
PZ1D2V7H	2.5	2.7	2.9	5	110	120	1
PZ1D3V0H	2.8	3.0	3.2	5	120	50	1
PZ1D3V3H	3.1	3.3	3.5	5	130	20	1
PZ1D3V6H	3.4	3.6	3.8	5	130	10	1
PZ1D3V9H	3.7	3.9	4.1	5	130	5	1
PZ1D4V3H	4	4.3	4.6	5	130	5	1
PZ1D4V7H	4.4	4.7	5	5	130	2	1
PZ1D5V1H	4.8	5.1	5.4	5	130	2	1.5
PZ1D5V6H	5.2	5.6	6	5	80	1	2.5
PZ1D6V2H	5.8	6.2	6.6	5	50	1	3
PZ1D6V8H	6.4	6.8	7.2	5	30	0.5	3.5
PZ1D7V5H	7	7.5	7.9	5	30	0.5	4
PZ1D8V2H	7.7	8.2	8.7	5	30	0.5	5
PZ1D9V1H	8.5	9.1	9.6	5	30	0.5	6
PZ1D10VH	9.4	10	10.6	5	30	0.1	7
PZ1D11VH	10.4	11	11.6	5	30	0.1	8
PZ1D12VH	11.4	12	12.7	5	35	0.1	9
PZ1D13VH	12.4	13	14.1	5	35	0.1	10
PZ1D15VH	13.8	15	15.6	5	40	0.1	11
PZ1D16VH	15.3	16	17.1	5	40	0.1	12
PZ1D18VH	16.8	18	19.1	5	45	0.1	13
PZ1D20VH	18.8	20	21.2	5	50	0.1	15
PZ1D22VH	20.8	22	23.3	5	55	0.1	17
PZ1D24VH	22.8	24	25.6	5	60	0.1	19
PZ1D27VH	25.1	27	28.9	5	70	0.1	21
PZ1D30VH	28	30	32	5	80	0.1	23
PZ1D33VH	31	33	35	5	80	0.1	25
PZ1D36VH	34	36	38	5	90	0.1	27
PZ1D39VH	37	39	41	2.5	100	2	30
PZ1D43VH	40	43	46	2.5	130	2	33
PZ1D47VH	44	47	50	2.5	150	2	36
PZ1D51VH	48	51	54	2.5	180	1	39
PZ1D56VH	52	56	60	2.5	180	1	43
PZ1D62VH	58	62	66	2.5	200	0.2	47
PZ1D68VH	64	68	72	2.5	250	0.2	52
PZ1D75VH	70	75	79	2.5	300	0.2	57

Zener Voltage Regulators

Product dimension (SOD-123)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.90	1.30	0.035	0.051
C	0.09	0.22	0.004	0.009
D	1.50	1.80	0.059	0.071
E	2.50	2.80	0.098	0.110
E ₁	3.60	3.90	0.142	0.154
L ₁	0.25	0.45	0.010	0.018
b	0.50	0.70	0.020	0.028
A ₁	-	0.20	-	0.008
∠	9°		9°	



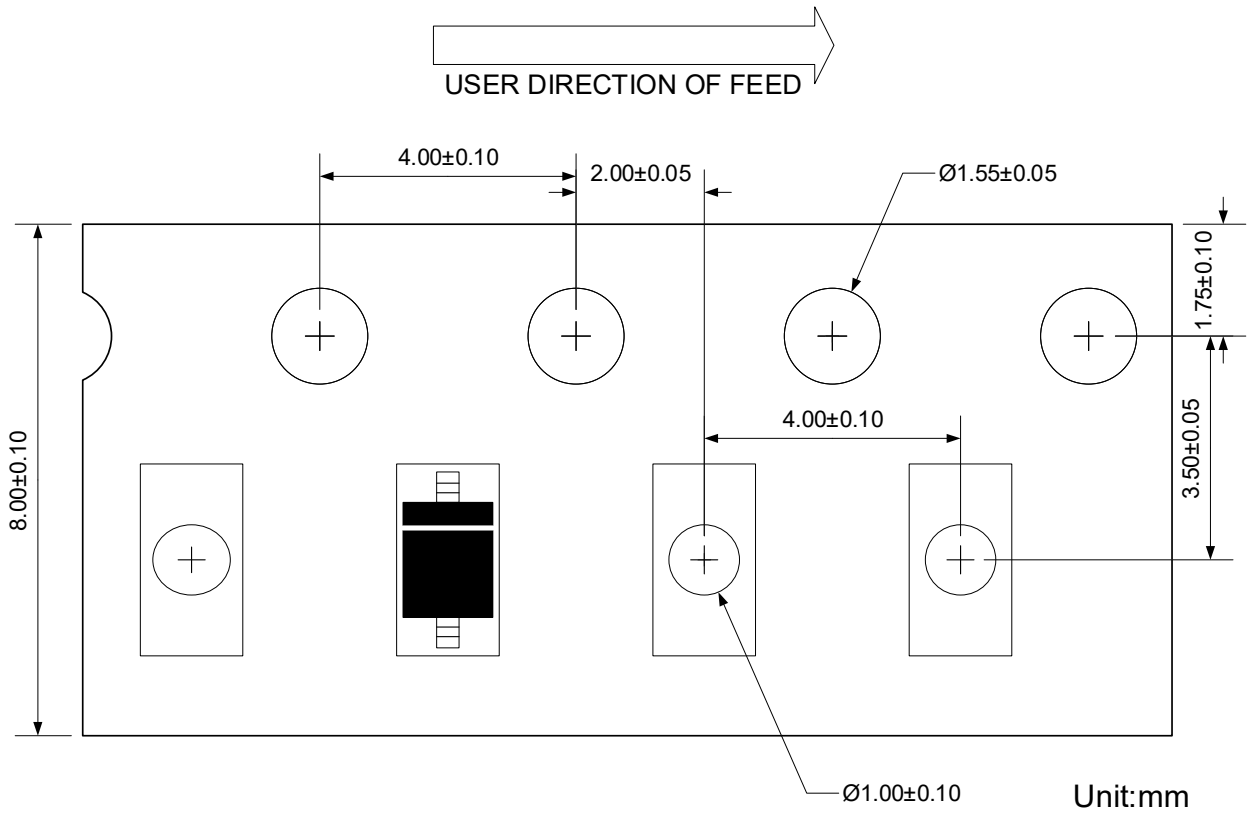
Suggested PCB Layout

Ordering information


Package	Reel	Shipping
SOD-123 (Pb-Free)	7"	3000 / Tape & Reel

Zener Voltage Regulators

Load with information




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