

Feature

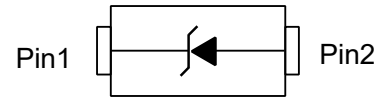
- Total power dissipation: Max. 500mW.
- Wide zener reverse voltage range 2.0V to 75V.
- Small plastic package suitable for surface mounted design.
- Tolerance approximately $\pm 5\%$



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 Junctioning 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

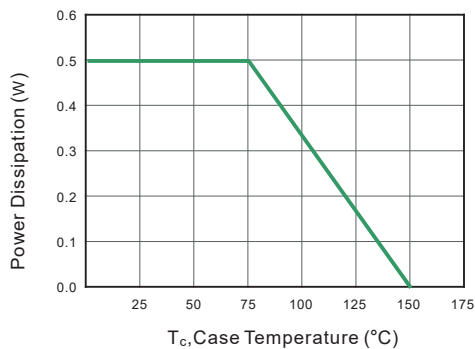


Fig.1 Maximum Continuous Power Derating

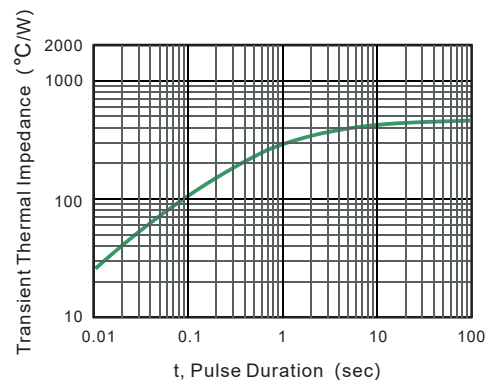


Fig.2 Typical Transient Thermal Impedance

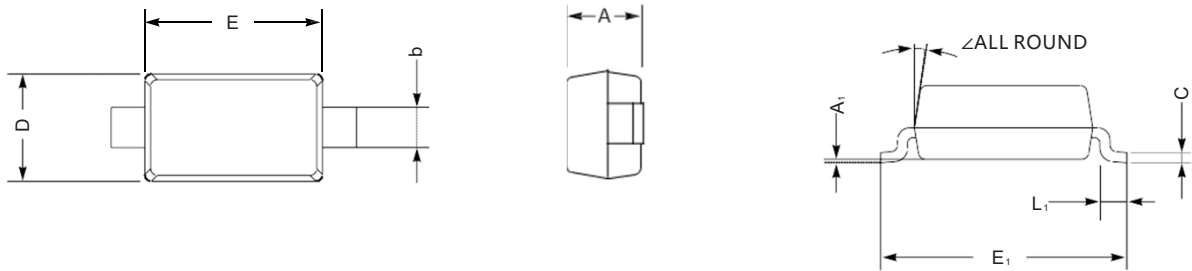
Zener Voltage Regulators

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

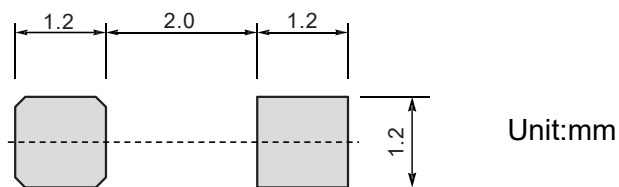
Device	Zener Voltage Range			I_{ZT} (mA)	Dynamic Impedance Z_{ZT} Max(Ω)	Reverse Current	
	V_Z					I_r	V_R
	Min(V)	Nom(V)	Max(V)			Max(μA)	V
PZ1D2V0H	1.8	2.0	2.15	5	100	120	0.5
PZ1D2V2H	2.08	2.2	2.33	5	100	120	0.7
PZ1D2V4H	2.28	2.4	2.56	5	100	120	1
PZ1D2V7H	2.5	2.7	2.9	5	110	120	1
PZ1D3V0H	2.8	3.0	3.2	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°	



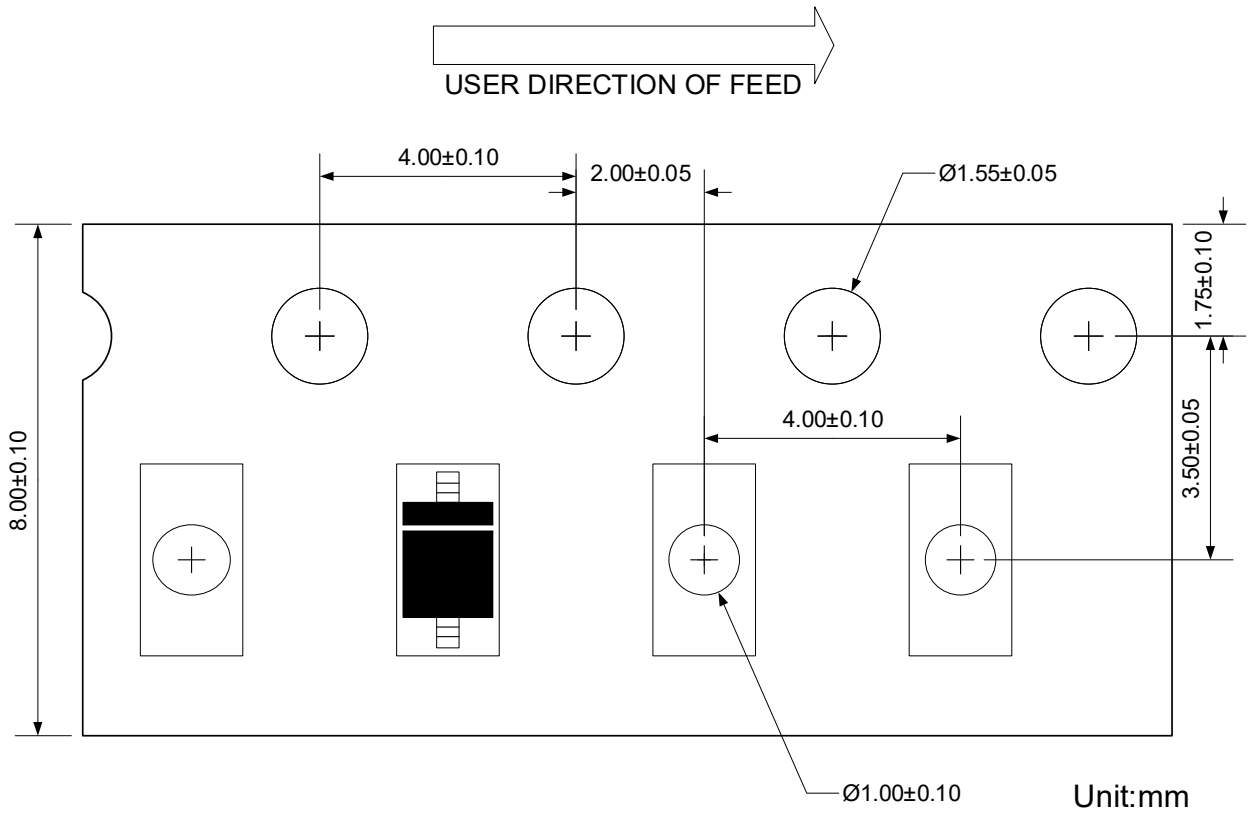
Suggested PCB Layout

Ordering information


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

Zener Voltage Regulators

Load with information




IMPORTANT NOTICE

 and **Prisemi**[®] are registered trademarks of **Prisemi Electronics Co., Ltd (Prisemi)**, Prisemi reserves the right to make changes without further notice to any products herein. Prisemi makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Prisemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. “Typical” parameters which may be provided in Prisemi data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including “Typicals” must be validated for each customer application by customer’s technical experts. Prisemi does not convey any license under its patent rights nor the rights of others. The products listed in this document are designed to be used with ordinary electronic equipment or devices, Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

Website: <http://www.prisemi.com>

For additional information, please contact your local Sales Representative.

©Copyright 2009, Prisemi Electronics

 **Prisemi**[®] is a registered trademark of Prisemi Electronics.

All rights are reserved.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Zener Diodes](#) category:

Click to view products by [Prisemi](#) manufacturer:

Other Similar products are found below :

[RKZ13B2KG#P1](#) [DL5234B](#) [EDZTE6113B](#) [1N4682](#) [1N4693](#) [1N4732A](#) [1N4736A](#) [1N4750A](#) [1N4759ARL](#) [1N5241B](#) [1N5365B](#) [1N5369B](#)
[1N747A](#) [1N964B](#) [1N966B](#) [1N968B](#) [1N972B](#) [JANS1N4974US](#) [JANTX1N5907](#) [1N4692](#) [1N4700](#) [1N4702](#) [1N4704](#) [1N4711](#) [1N4714](#)
[1N4745ARL](#) [1N4752ARL](#) [1N4760ARL](#) [1N5221B](#) [1N5242BTR](#) [1N5350B](#) [1N5352B](#) [1N961BRR1](#) [1N964BRL](#) [RKZ5.1BKU#P6](#)
[3SMAJ5946B-TP](#) [3SMAJ5950B-TP](#) [3SMBJ5925B-TP](#) [MMSZ5230BQ-13-F](#) [MMSZ5232BQ-13-F](#) [BZX84C7V5](#) [3SMAJ5945B-TP](#)
[3SMAJ5947B-TP](#) [3SMBJ5941B-TP](#) [DL4732A-T3](#) [DZ2S240M0L](#) [SMAZ27-TP](#) [ZMM5224B-7](#) [RD16UM-T1-A](#) [RD39S-T1-A](#)