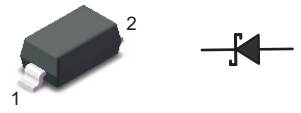
Silicon Planar Zener Diodes

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Simplified outline SOD-123 and symbol

FEATURES

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

MECHANICAL DATA

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

Absolute Maximum Ratings And Characteristics (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500	mW
Forward Voltage at I_F = 10 mA	V_F	0.9	V
Typical thermal resistance juncting to ambient (1)	$R_{\theta JA}$	340	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

(1) Thermal resistance from junction to ambient at P.C.B. mounted with 2.0" X 2.0" (54 X 5 cm) copper areas pads.

Fig.1 Maximum Continuous Power Derating

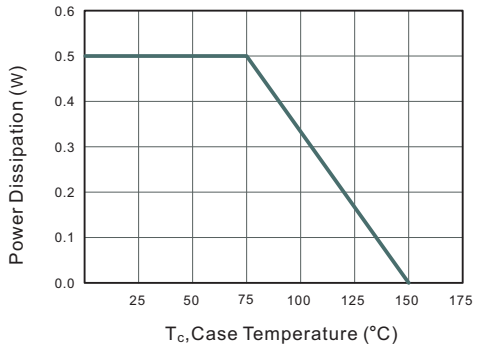
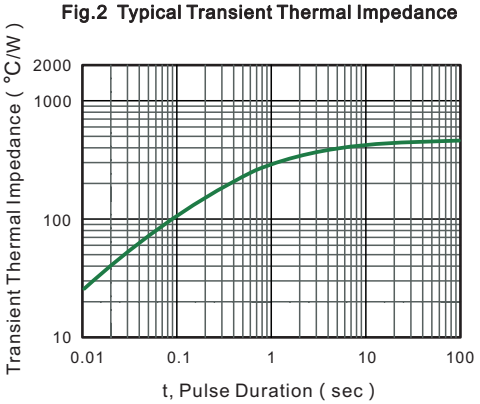


Fig.2 Typical Transient Thermal Impedance



Characteristics at Ta = 25°C

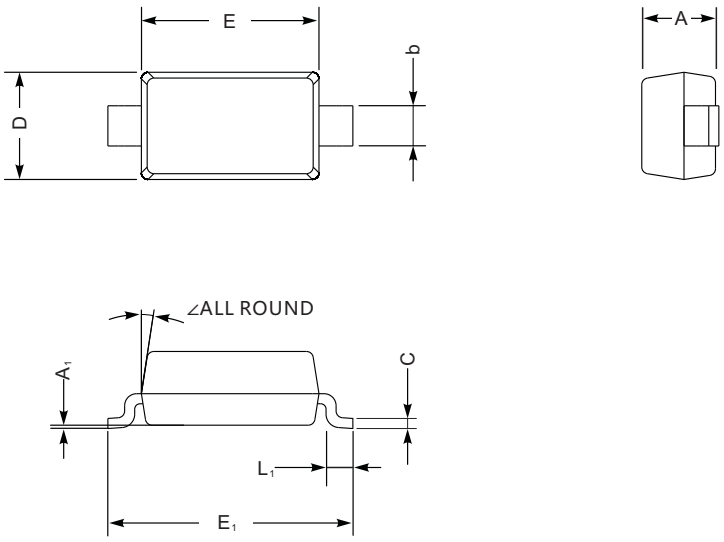
Type	Marking	Zener Voltage Range (1)				Dynamic Impedance	Reverse Current	
		V_{ZT} (at I_{ZT})			I_{ZT}	Z_{ZT} (at I_{ZT})	I_R	at V_R
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)	Max (μA)	(V)
MM1Z2V0	4A	1.8	2.0	2.15	5	100	120	0.5
MM1Z2V2	4B	2.08	2.2	2.33	5	100	120	0.7
MM1Z2V4	4C	2.28	2.4	2.56	5	100	120	1
MM1Z2V7	4D	2.5	2.7	2.9	5	110	120	1
MM1Z3V0	4E	2.8	3.0	3.2	5	120	50	1
MM1Z3V3	4F	3.1	3.3	3.5	5	130	20	1
MM1Z3V6	4H	3.4	3.6	3.8	5	130	10	1
MM1Z3V9	4J	3.7	3.9	4.1	5	130	5	1
MM1Z4V3	4K	4	4.3	4.6	5	130	5	1
MM1Z4V7	4M	4.4	4.7	5	5	130	2	1
MM1Z5V1	4N	4.8	5.1	5.4	5	130	2	1.5
MM1Z5V6	4P	5.2	5.6	6	5	80	1	2.5
MM1Z6V2	4R	5.8	6.2	6.6	5	50	1	3
MM1Z6V8	4X	6.4	6.8	7.2	5	30	0.5	3.5
MM1Z7V5	4Y	7	7.5	7.9	5	30	0.5	4
MM1Z8V2	4Z	7.7	8.2	8.7	5	30	0.5	5
MM1Z9V1	5A	8.5	9.1	9.6	5	30	0.5	6
MM1Z10	5B	9.4	10	10.6	5	30	0.1	7
MM1Z11	5C	10.4	11	11.6	5	30	0.1	8
MM1Z12	5D	11.4	12	12.7	5	35	0.1	9
MM1Z13	5E	12.4	13	14.1	5	35	0.1	10
MM1Z15	5F	13.8	15	15.6	5	40	0.1	11
MM1Z16	5H	15.3	16	17.1	5	40	0.1	12
MM1Z18	5J	16.8	18	19.1	5	45	0.1	13
MM1Z20	5K	18.8	20	21.2	5	50	0.1	15
MM1Z22	5M	20.8	22	23.3	5	55	0.1	17
MM1Z24	5N	22.8	24	25.6	5	60	0.1	19
MM1Z27	5P	25.1	27	28.9	5	70	0.1	21
MM1Z30	5R	28	30	32	5	80	0.1	23
MM1Z33	5X	31	33	35	5	80	0.1	25
MM1Z36	5Y	34	36	38	5	90	0.1	27
MM1Z39	5Z	37	39	41	2.5	100	2	30
MM1Z43	6A	40	43	46	2.5	130	2	33
MM1Z47	6B	44	47	50	2.5	150	2	36
MM1Z51	6C	48	51	54	2.5	180	1	39
MM1Z56	6D	52	56	60	2.5	180	1	43
MM1Z62	6E	58	62	66	2.5	200	0.2	47
MM1Z68	6F	64	68	72	2.5	250	0.2	52
MM1Z75	6H	70	75	79	2.5	300	0.2	57

(1) V_{ZT} is tested with pulses (20 ms)

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

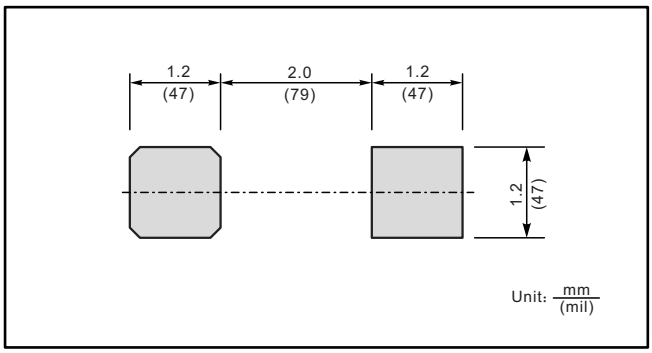
SOD-123



SOD-123 mechanical data

UNIT		A	C	D	E	E_1	L_1	b	A_1	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	

The recommended mounting pad size



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Zener Diodes ***category:***

Click to view products by Jingdao ***manufacturer:***

Other Similar products are found below :

MMSZ5245BS-7-F RKZ13B2KG#P1 RKZ5.6B2KJ#R1 EDZTE6113B EDZTE6116B EDZTE616.8B 1N747A 1N966B NTE5116A NTE5121A NTE5139A NTE5147A NTE5152A NTE5156A NTE5164A JANS1N4974US SMAJ4764A-TP RKZ5.1BKU#P6 3SMAJ5946B-TP 3SMAJ5950B-TP 3SMBJ5920B-TP 3SMBJ5925B-TP TDZTR24 441774C MMSZ4678-TP MMSZ5232BQ-13-F BZG04-36 BZG05C9V1-HE3-TR HZM30NBTR-E UDZTE-175.1B 3SMAJ5945B-TP 3SMAJ5947B-TP 3SMBJ5941B-TP DL4746A-TP RKZ18B2KK#R1 RKZ10B2KL#R1 RKZ6.8B2KL#R1 RKZ8.2B2KL#R1 DZ2S240M0L SMAZ27-TP SMBZ5920B-E3/52 ZMM3.0 RD16UM-T1-A RD39S-T1-A RD9.1S-T1-A RD10S-T1-A RD20S-T1-A RD2.2S-T1-A RD2.7UM-T1-A HZM24NB1TL-E