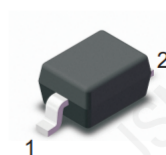


FEATURES

- Total power dissipation: Max. 300mW.
- Wide zener reverse voltage range 2.0V to 75V.
- Small plastic package suitable for surface mounted design.
- Tolerance approximately $\pm 2\%$



Top View
Simplified outline SOD-323 and symbol



MECHANICAL DATA

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	300	mW
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.9	V
Typical thermal resistance junction to ambient ⁽¹⁾	$R_{\theta JA}$	417	°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" (5 X 5 cm) copper areas pads.

Fig.1 Maximum Continuous Power Derating

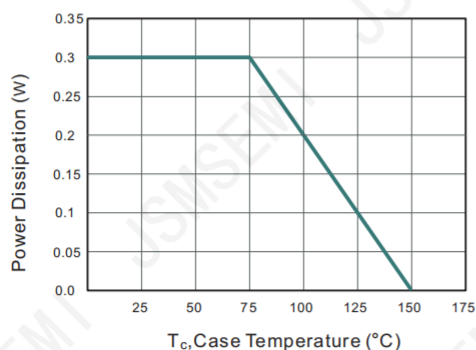
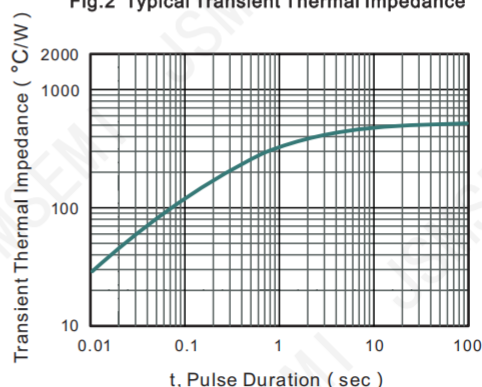


Fig.2 Typical Transient Thermal Impedance



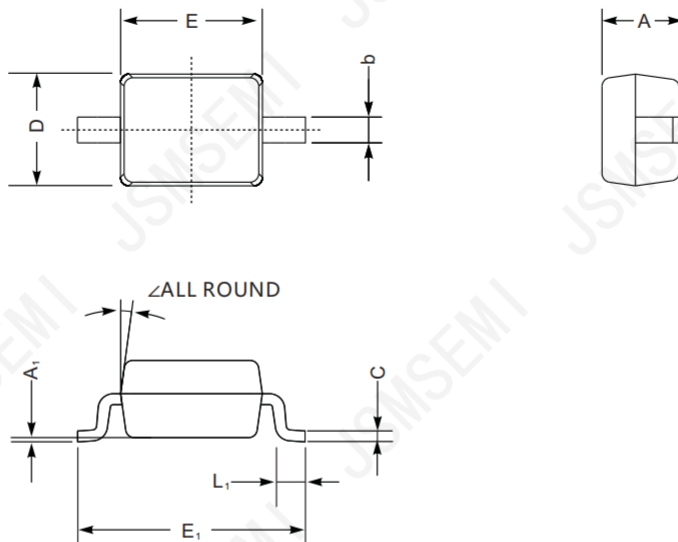
Characteristics at Ta = 25°C

Type	Marking	Zener Voltage Range (1)			I _{ZT}	Dynamic Impedance	Reverse Current	
		V _{ZT} (at I _{ZT})				Z _{ZT} (at I _{ZT})	I _R	at V _R
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)	Max (μA)	(V)
PDZ2.0B,115	0B	1.96	2.0	2.04	5	100	120	0.5
PDZ2.2B,115	0C	2.16	2.2	2.24	5	100	120	0.7
PDZ2.4B,115	C1	2.35	2.4	2.45	5	100	120	1
PDZ2.7B,115	D1	2.65	2.7	2.75	5	110	120	1
PDZ3.0B,115	E1	2.94	3.0	3.06	5	120	50	1
PDZ3.3B,115	F1	3.23	3.3	3.37	5	130	20	1
PDZ3.6B,115	H1	3.53	3.6	3.67	5	130	10	1
PDZ3.9B,115	J1	3.82	3.9	3.98	5	130	5	1
PDZ4.3B,115	K1	4.21	4.3	4.39	5	130	5	1
PDZ4.7B,115	M1	4.61	4.7	4.79	5	130	2	1
PDZ5.1B,115	N1	5	5.1	5.2	5	130	2	1.5
PDZ5.6B,115	P1	5.49	5.6	5.71	5	80	1	2.5
PDZ6.2B,115	R1	6.08	6.2	6.32	5	50	1	3
PDZ6.8B,115	X1	6.66	6.8	6.94	5	30	0.5	3.5
PDZ7.5B,115	Y1	7.35	7.5	7.65	5	30	0.5	4
PDZ8.2B,115	Z1	8.04	8.2	8.36	5	30	0.5	5
PDZ9.1B,115	A2	8.92	9.1	9.28	5	30	0.5	6
PDZ10B,115	B2	9.8	10	10.2	5	30	0.1	7
PDZ11B,115	C2	10.78	11	11.22	5	30	0.1	8
PDZ12B,115	D2	11.76	12	12.24	5	35	0.1	9
PDZ13B,115	E2	12.74	13	13.26	5	35	0.1	10
PDZ15B,115	F2	14.7	15	15.3	5	40	0.1	11
PDZ16B,115	H2	15.68	16	16.32	5	40	0.1	12
PDZ18B,115	J2	17.64	18	18.36	5	45	0.1	13
PDZ20B,115	K2	19.6	20	20.4	5	50	0.1	15
PDZ22B,115	M2	21.56	22	22.44	5	55	0.1	17
PDZ24B,115	N2	23.52	24	24.48	5	60	0.1	19
PDZ27B,115	P2	26.46	27	27.54	2	70	0.1	21
PDZ30B,115	R2	29.4	30	30.60	2	80	0.1	23
PDZ33B,115	X2	32.34	33	33.66	2	80	0.1	25
PDZ36B,115	Y2	35.28	36	36.72	2	90	0.1	27
PDZ39B,115	Z2	38.22	39	39.78	2	100	0.1	30
PDZ43B,115	A3	42.14	43	43.86	2	130	0.1	33
PDZ47B,115	B3	46.06	47	47.94	2	150	0.1	36
PDZ51B,115	C3	49.98	51	52.02	2	180	0.1	39
PDZ56B,115	D3	54.88	56	57.12	2	200	0.1	43
PDZ62B,115	E3	60.76	62	63.24	2	215	0.1	47
PDZ68B,115	F3	66.64	68	69.36	2	240	0.1	52
PDZ75B,115	H3	73.5	75	76.5	2	265	0.1	56

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

Package Information

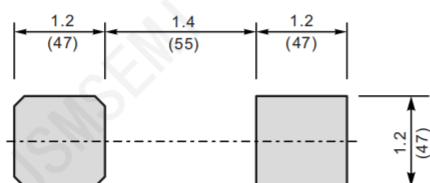
SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size



Unit: $\frac{\text{mm}}{(\text{mil})}$

Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

Important Notice

JSMSEMI Semiconductor (JSMSEMI) PRODUCTS ARE NEITHER DESIGNED NOR INTENDED FOR USE IN MILITARY AND/OR AEROSPACE, AUTOMOTIVE OR MEDICAL DEVICES OR SYSTEMS UNLESS THE SPECIFIC JSMSEMI PRODUCTS ARE SPECIFICALLY DESIGNATED BY JSMSEMI FOR SUCH USE. BUYERS ACKNOWLEDGE AND AGREE THAT ANY SUCH USE OF JSMSEMI PRODUCTS WHICH JSMSEMI HAS NOT DESIGNATED FOR USE IN MILITARY AND/OR AEROSPACE, AUTOMOTIVE OR MEDICAL DEVICES OR SYSTEMS IS SOLELY AT THE BUYER' S RISK.

JSMSEMI assumes no liability for application assistance or customer product design. Customers are responsible for their products and applications using JSMSEMI products.

Resale of JSMSEMI products or services with statements diferent from or beyond the parameters stated by JSMSEMI for that product or service voids all express and any implied warranties for the associated JSMSEMI product or s ervice. JSMSEMI is not responsible or liable for any such statements.

JSMSEMI All Rights Reserved. Information and data in this document are owned by JSMSEMI wholly and may not be edited, reproduced, or redistributed in any way without the express written consent from JSMSEMI.

Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the JSMSEMI product that you intend to use.

For additional information please contact Kevin@jsemsemi.com or visit www.jsemsemi.com