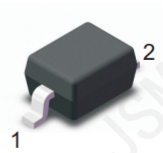
FEATURES

- Total power dissipation: Max. 300mW.
- Wide zener reverse voltage range 2.0V to 75V.
- Small plastic package suitable for surface mounted design.
- Tolerance approximately±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 mA	V_F	0.9	V
Typical thermal resistance juncting 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

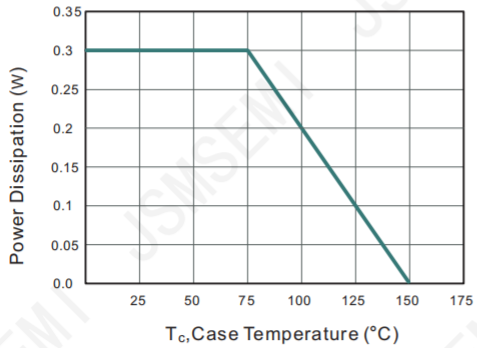
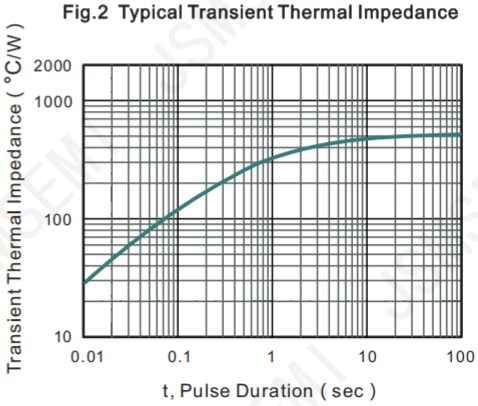


Fig.2 Typical Transient Thermal Impedance



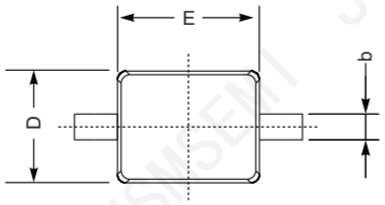
Characteristics at Ta = 25°C

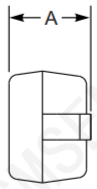
Type	Marking	Zener Voltage Range (1)			I_{ZT}	Dynamic Impedance	Reverse Current	
		V_{ZT} (at I_{ZT})				Z_{ZT} (at I_{ZT})	I_R	at V_R
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)	Max (μA)	(V)
PDZ2.0B,115	0B	1.96	2.0	2.04	5	100	120	0.5
PDZ2.2B,115	0C	2.16	2.2	2.24	5	100	120	0.7
PDZ2.4B,115	C1	2.35	2.4	2.45	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

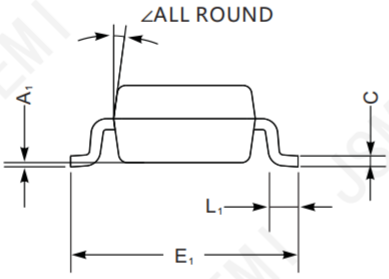
(1) V_{ZT} is tested with pulses (20 ms)

Package Information

SOD-323



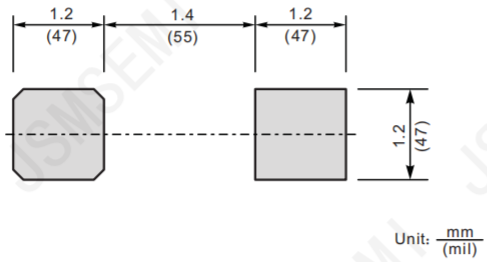




SOD-323 mechanical data

UNIT		A	C	D	E	E1	b	L1	A1	∠
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



Revision History

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

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