

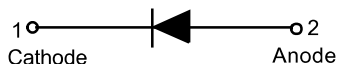
FEATURES

- Total power dissipation: Max. 500mW.
- Wide zener reverse voltage range 2.4V to 43V.
- Ideally suited for automated assembly processes

Schematic & PIN Configuration



SOD-323



Circuit



Marking

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

Parameter	Symbol	Value	Unit
Power Dissipation (NOTE 1)	P_D	250	mW
Forward Voltage at $I_F = 10$ mA(NOTE 2)	V_F	0.9	V
Typical thermal resistance junction to ambient	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Fig.1 Power Derating Curve

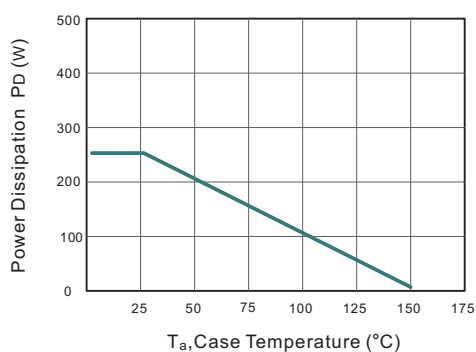
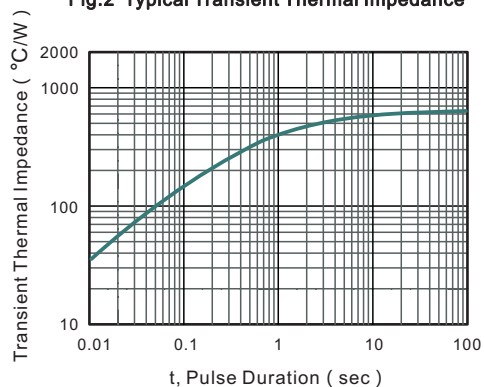


Fig.2 Typical Transient Thermal Impedance



ELECTRICAL CHARACTERISTICS

Characteristics at Ta = 25°C

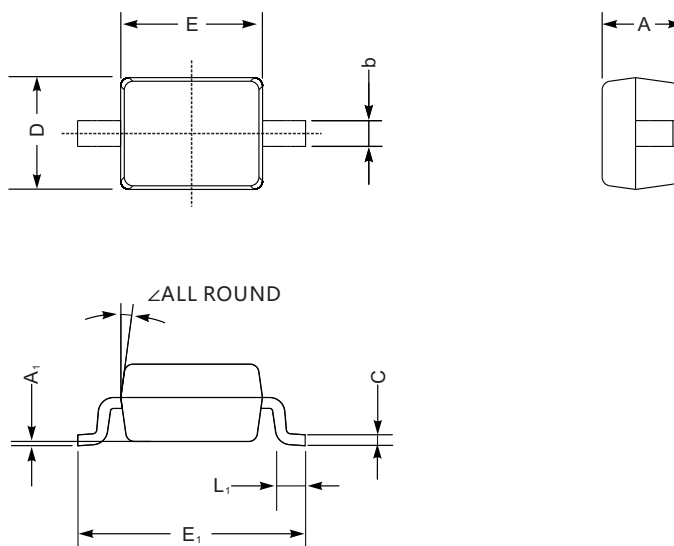
Type	Marking	Zener Voltage Range (NOTE 2)				Maximum Zener Impedance (NOTE 3)			Maximum Reverse Current (NOTE 2)		Typical Temperature Coefficient @I _{ZTC} mV/°C		Test Current I _{ZTC}
		V _{ZT} (@ I _{ZT})			I _{ZT}	Z _{ZT} (@ I _{ZT})	Z _{ZK} (@ I _{ZK})	I _{ZK}	I _R	V _R			
		Min (V)	Nom (V)	Max (V)	(mA)	(Ω)		mA	μA	V	MIN	MAX	mA
SZ2V4GD322	WX	2.2	2.4	2.6	5	100	600	1	50	1	-3.5	0	5
SZ2V7GD322	W1	2.5	2.7	2.9	5	100	600	1	20	1	-3.5	0	5
SZ3V0GD322	W2	2.8	3	3.2	5	95	600	1	10	1	-3.5	0	5
SZ3V3GD322	W3	3.1	3.3	3.5	5	95	600	1	5	1	-3.5	0	5
SZ3V6GD322	W4	3.4	3.6	3.8	5	90	600	1	5	1	-3.5	0	5
SZ3V9GD322	W5	3.7	3.9	4.1	5	90	600	1	3	1	-3.5	0	5
SZ4V3GD322	W6	4.0	4.3	4.6	5	90	600	1	3	1	-3.5	0	5
SZ4V7GD322	W7	4.4	4.7	5	5	80	500	1	3	2	-3.5	0.2	5
SZ5V1GD322	ZD	4.8	5.1	5.4	5	60	480	1	2	2	-2.7	1.2	5
SZ5V6GD322	W9	5.2	5.6	6	5	40	400	1	1	2	-2	2.5	5
SZ6V2GD322	WA	5.8	6.2	6.6	5	10	150	1	3	4	0.4	3.7	5
SZ6V8GD322	WB	6.4	6.8	7.2	5	15	80	1	2	4	1.2	4.5	5
SZ7V5GD322	WC	7	7.5	7.9	5	15	80	1	1	5	2.5	5.3	5
SZ8V2GD322	WD	7.7	8.2	8.7	5	15	80	1	0.7	5	3.2	6.2	5
SZ9V1GD322	WE	8.5	9.1	9.6	5	15	100	1	0.5	6	3.8	7	5
SZ10VGD322	WF	9.4	10	10.6	5	20	150	1	0.2	7	4.5	8	5
SZ11VGD322	WG	10.4	11	11.6	5	20	150	1	0.1	8	5.4	9	5
SZ12VGD322	WH	11.4	12	12.7	5	25	150	1	0.1	8	6	10	5
SZ13VGD322	WI	12.4	13	14.1	5	30	170	1	0.1	8	7	11	5
SZ15VGD322	WJ	13.8	15	15.6	5	30	200	1	0.1	10.5	9.2	13	5
SZ16VGD322	WK	15.3	16	17.1	5	40	200	1	0.1	11.2	10.4	14	5
SZ18VGD322	WL	16.8	18	19.1	5	45	225	1	0.1	12.6	12.4	16	5
SZ20VGD322	WM	18.8	20	21.2	5	55	225	1	0.1	14	14.4	18	5
SZ22VGD322	WN	20.8	22	23.3	5	55	250	1	0.1	15.4	16.4	20	5
SZ24VGD322	WO	22.8	24	25.6	5	70	250	1	0.1	16.8	18.4	22	5
SZ27VGD322	WP	25.1	27	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3	2
SZ30VGD322	WQ	28	30	32	2	80	300	0.5	0.1	21	24.4	29.4	2
SZ33VGD322	WR	31	33	35	2	80	325	0.5	0.1	23.1	27.4	33.4	2
SZ36VGD322	WS	34	36	38	2	90	350	0.5	0.1	25.2	30.4	37.4	2
SZ39VGD322	WT	37	39	41	2	130	350	0.5	0.1	27.3	33.4	41.2	2
SZ43VGD322	WU	40	43	46	2	100	700	1	0.1	32	10	12	5

NOTE: 1. Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm².
2. Short duration test pulse used to minimize self-heating effect.
3. f = 1kHz.

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

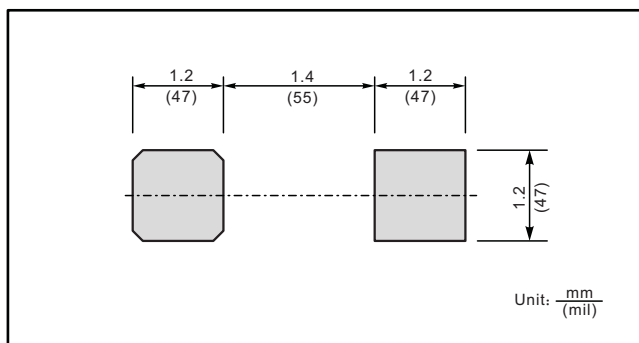
SOD-323



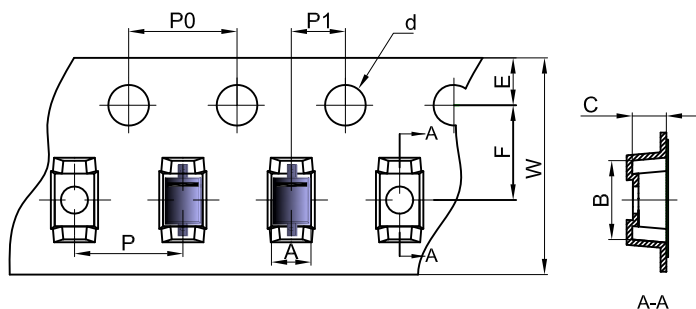
SOD-323 mechanical data

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

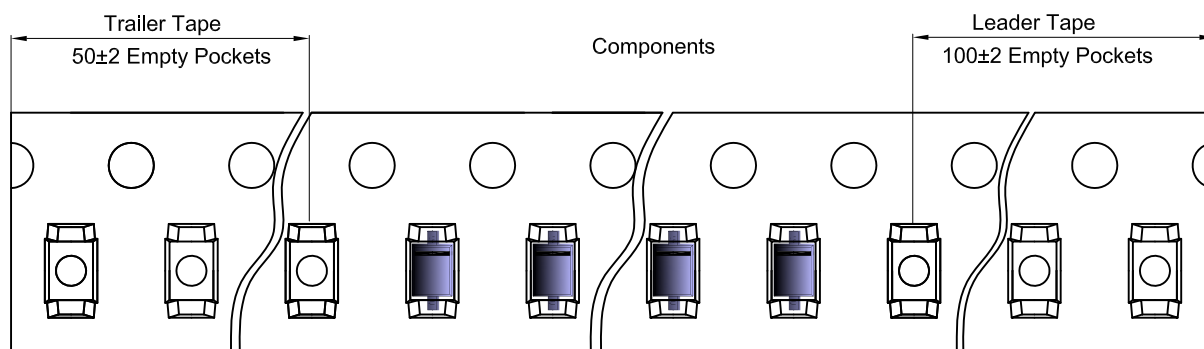


SOD-323 Tape and Reel

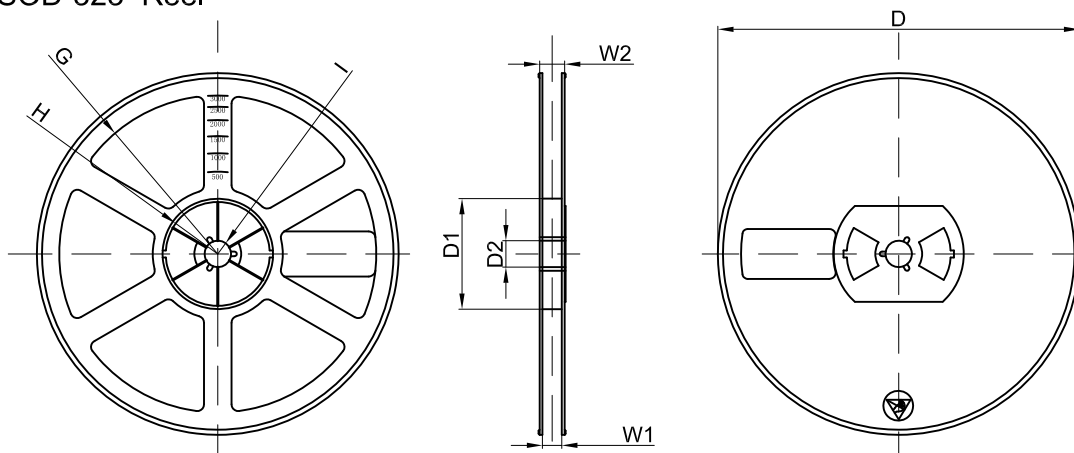


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOD-323 Tape Leader and Trailer



SOD-323 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	