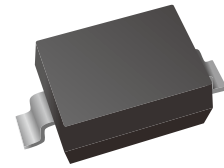


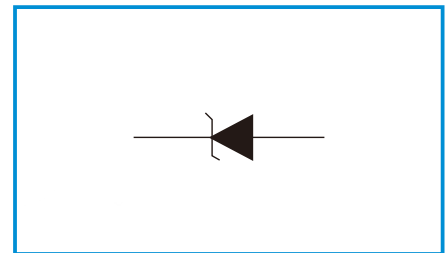
Zener Diode

Features

- Low Zener Impedance
- Power Dissipation of 200mW
- High Stability and High Reliability



Functional Diagram



Mechanical Data

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameters	Symbol	Value	Unit
Power Dissipation	Pd	200 ¹⁾	mW
Forward Voltage @IF=10mA	Vf	0.9 ²⁾	V
Storage & Junction temperature range	Ts,Tj	-55-+150	°C

- 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

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

Device	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature coefficient @ IZTC=mV/°C		Test Current IZTC
		Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR	Min	Max	
		Nom(V)	Min(V)	Max(V)									
LTZS3V6B	D0	3.6	3.60	3.85	5	90	600	1.0	4.5	1.0	-3.5	0	5
LTZS3V9B	D1	3.9	3.89	4.16	5	90	600	1.0	2.7	1.0	-3.5	0	5
LTZS4V3B	D2	4.3	4.17	4.43	5	90	600	1.0	2.7	1.0	-3.5	0	5
LTZS4V7B	D3	4.7	4.55	4.75	5	80	500	1.0	2.7	1.0	-3.5	0.2	5
LTZS5V1B	D4	5.1	4.98	5.20	5	60	500	1.0	1.8	2.0	-2.7	1.2	5
LTZS5V6B	D5	5.6	5.49	5.73	5	40	300	1.0	0.9	3.0	-2.0	2.5	5
LTZS6V2B	D6	6.2	6.06	6.33	5	40	150	1.0	2.7	3.0	0.4	3.7	5
LTZS6V8B	D7	6.8	6.65	6.93	5	30	75	1.0	1.8	4.0	1.2	4.5	5
LTZS7V5B	D8	7.5	7.28	7.60	5	30	75	1.0	0.9	4.0	2.5	5.3	5
LTZS8V2B	D9	8.2	8.02	8.36	5	30	75	1.0	0.63	5.0	3.2	6.2	5
LTZS9V1B	DA	9.1	8.85	9.23	5	30	90	1.0	0.45	6.0	3.8	7.0	5
LTZS10B	DB	10	9.77	10.21	5	20	150	1.0	0.18	7.0	4.5	8.0	5
LTZS11B	DC	11	10.76	11.22	5	20	150	1.0	0.09	8.0	5.4	9.0	5
LTZS12B	DE	12	11.74	12.24	5	20	150	1.0	0.09	9.0	6.0	10.0	5
LTZS13B	DF	13	12.91	13.49	5	40	160	1.0	0.045	10.0	7.0	11.0	5
LTZS15B	DG	15	14.34	14.98	5	40	190	1.0	0.045	11	9.2	13.0	5
LTZS16B	DH	16	15.85	16.51	5	40	190	1.0	0.045	12	10.4	14.0	5
LTZS18B	DJ	18	17.56	18.35	5	50	220	1.0	0.045	13	12.4	16.0	5
LTZS20B	DK	20	19.52	20.39	5	60	220	1.0	0.045	15	14.4	18.0	5
LTZS22B	DL	22	21.54	22.47	5	80	240	1.0	0.045	17	16.4	20.0	5
LTZS24B	DM	24	23.72	24.78	5	80	240	1.0	0.045	19	18.4	22.0	5
LTZS27B	DN	27	26.19	27.53	5	100	300	0.5	0.045	21	21.4	25.3	2
LTZS30B	DP	30	29.19	30.69	5	100	300	0.5	0.045	23	24.4	29.4	2
LTZS33B	DR	33	32.15	33.79	5	100	310	0.5	0.045	25	27.4	33.4	2
LTZS36B	DS	36	35.07	36.87	5	100	330	0.5	0.045	27	30.4	37.4	2

Characteristic Curves

Fig.1 Zener Voltage Characteristics

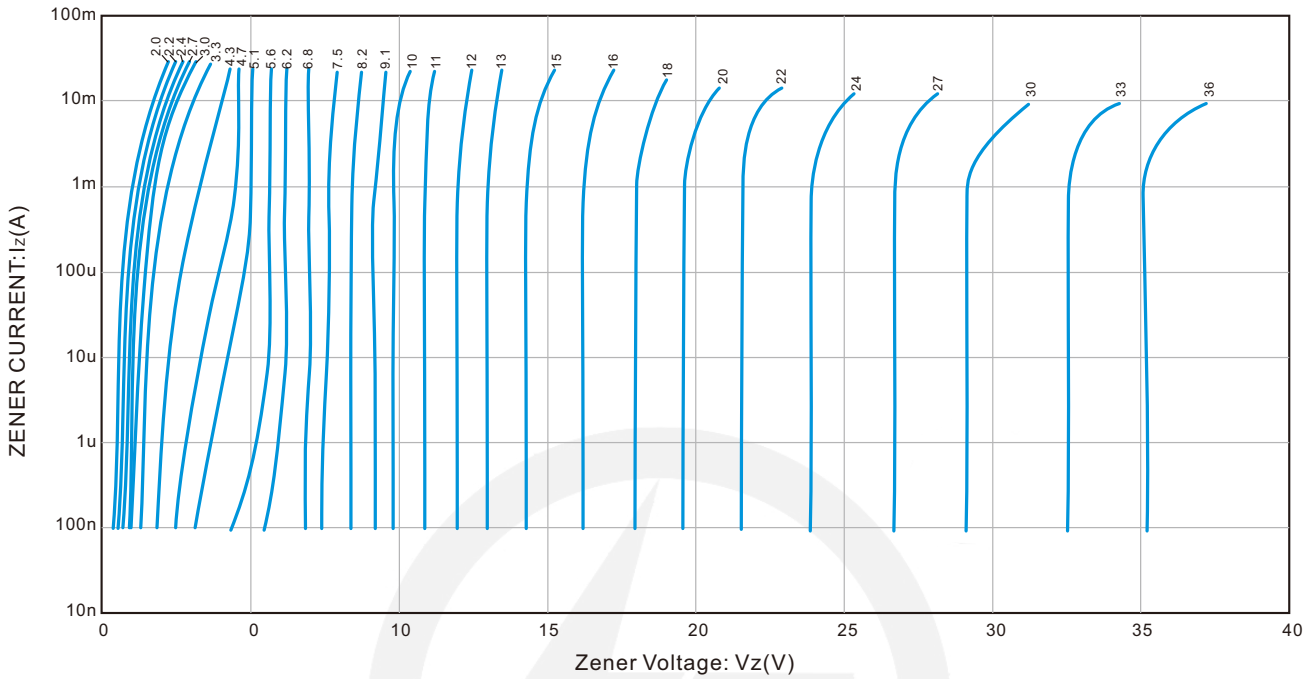


Fig.2 Derating Curve

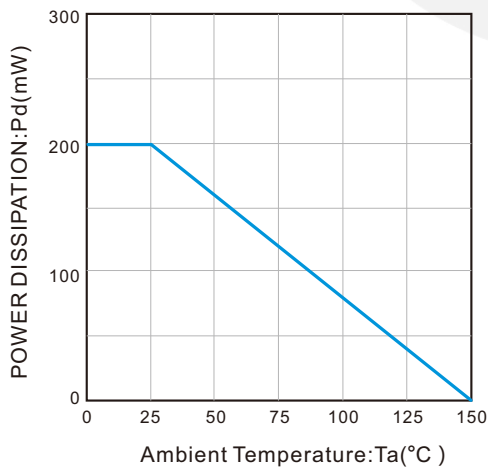
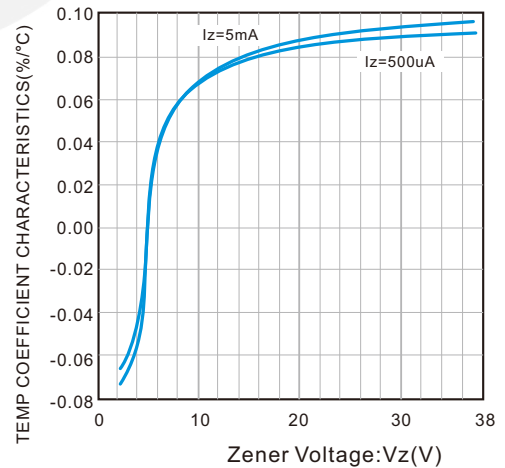
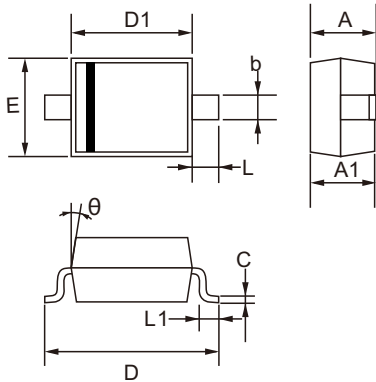


Fig.3 Zener Voltage-temp coefficient characteristics



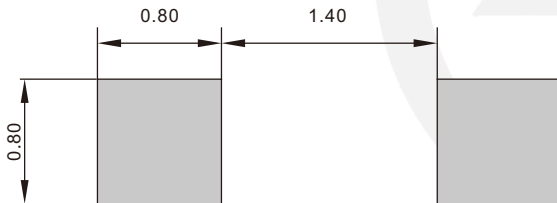
SOD-323 Package Outline

Unit: mm

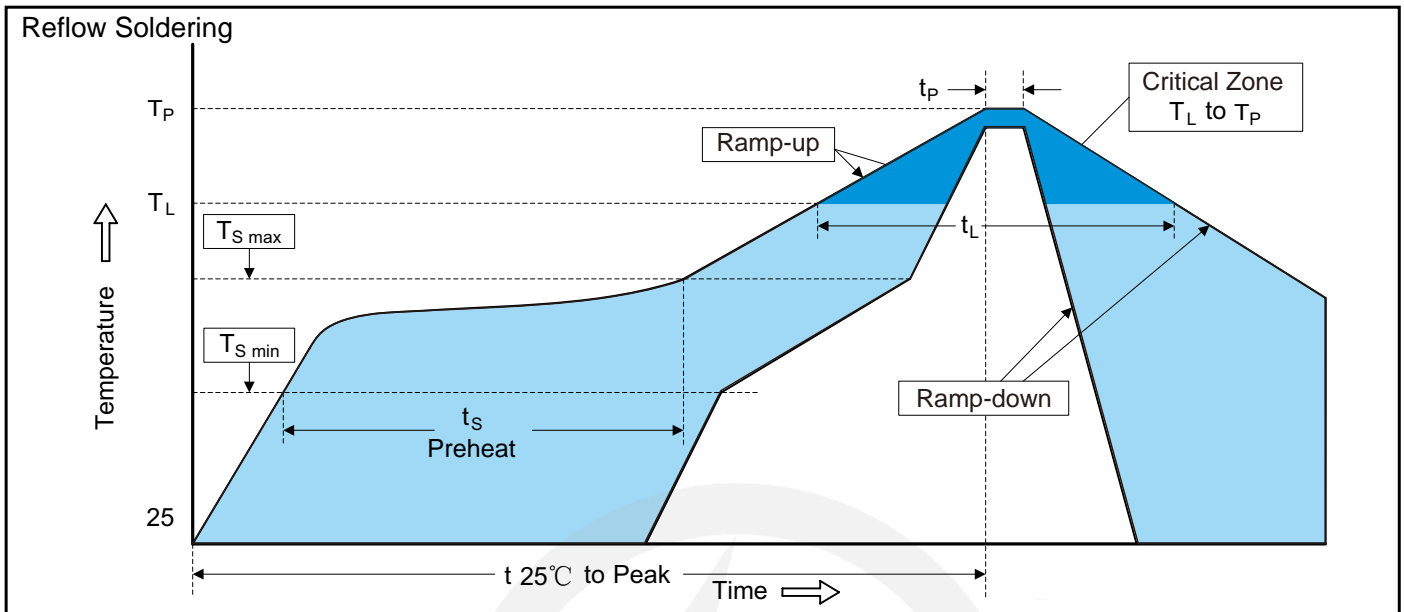


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.800	1.100
A1	0.800	0.900
b	0.250	0.400
C	0.080	0.177
D	2.300	2.800
D1	1.400	1.800
E	1.150	1.400
L1	0.100	0.400
L	0.475 TYP.	
θ	8°	

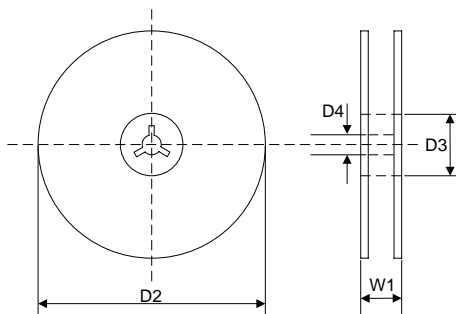
SOD-323 Suggested Pad Layout



- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$
 3. The pad layout is for reference purpose only.

Recommended Soldering Conditions

Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3°C/second max.
Preheat -Temperature Min ($T_{S\ min}$) -Temperature Max ($T_{S\ max}$) -Time (min to max) (t_s)	150°C 200°C 60-180 seconds
$T_{S\ max}$ to T_L -Ramp-up Rate	3°C/second max.
Time maintained above: -Temperature (T_L) -Time (t_L)	217°C 60-150 seconds
Peak Temperature (T_P)	260°C
Time within 5°C of actual Peak Temperature (t_P)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

7" Reel


D2	$\Phi 178.0 \pm 2.0$
----	----------------------

D3	$\Phi 50.0 \text{ Min.}$
----	--------------------------

D4	$\Phi 13.0 \pm 0.5$
----	---------------------

W1	16.0 ± 2.0
----	----------------

Quantity: 3000PCS