

Feature

- Ultra Small mold type. (SOD-323)
- Low I_R
- High reliability.

Applications

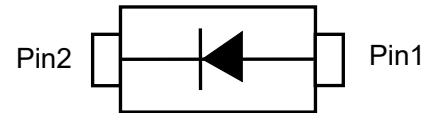
- Low current rectification

Construction

- Silicon epitaxial planar

Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260°C
- Pure tin plating: 7 ~ 17 um
- Pin flatness : ≤3mil


Circuit Diagram

Marking(Top View)
Electrical characteristics per line@25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.35	0.45	V	$I_F=20mA$
Forward voltage	V_F	-	0.55	0.65	V	$I_F=200mA$
Forward voltage	V_F	-	0.65	0.80	V	$I_F=350mA$
Reverse current	I_R	-	-	5	uA	$V_R=40V$
Reverse current	I_R	-	-	2	uA	$V_R=30V$
Junction Capacitance	C_j	-	30	50	pF	$V_R=0V$ $f=1MHz$

Absolute maximum rating@25°C

Parameter	Symbol	limits	Unit
Reverse voltage(repetitive peak) Reverse voltage (DC)	V_{RM}	40	V
Average rectified forward current	I_o	0.35	A
Peak forward surge current(8.33ms 1/2sine waveform with single pulse)	I_{FSM}	2	A

Absolute maximum rating@25°C

Parameter	Symbol	limits	Unit
Power Dissipation	PD	200	mW
Thermal Resistance Junction to Ambient	R θ JA	500	°C/W
Operating Junction temperature Range	T _J	-55 to 125	°C
Storage temperature	T _{stg}	-55 to 125	°C

Typical Characteristics

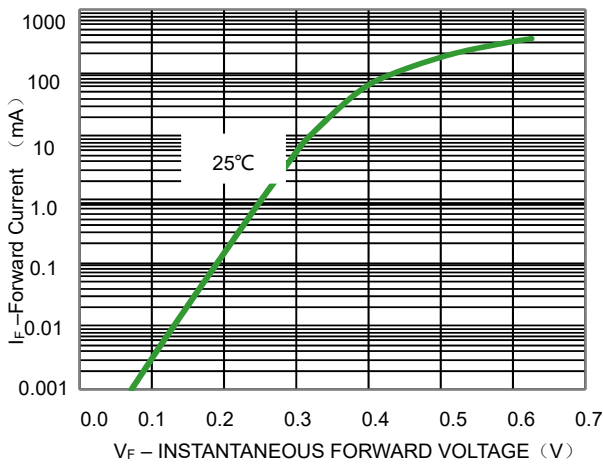


Fig 1. Typical Forward Characteristics

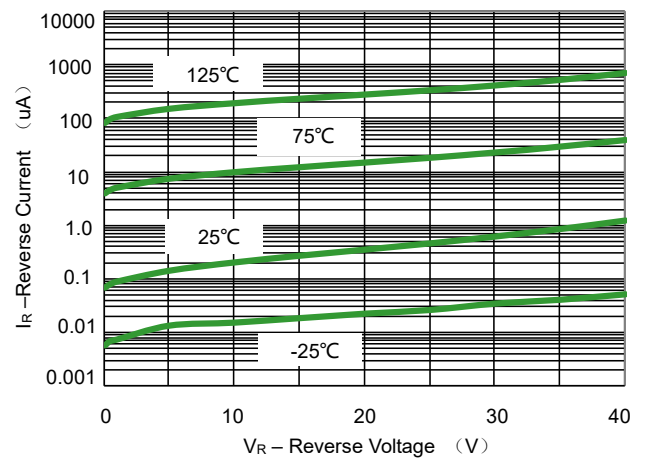
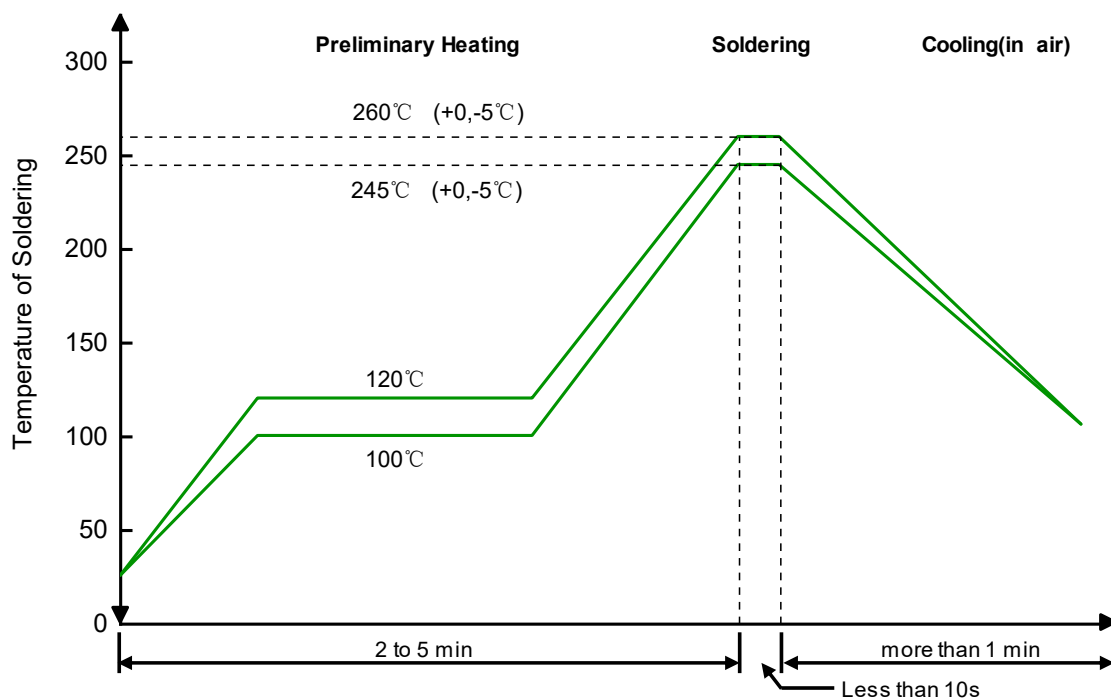


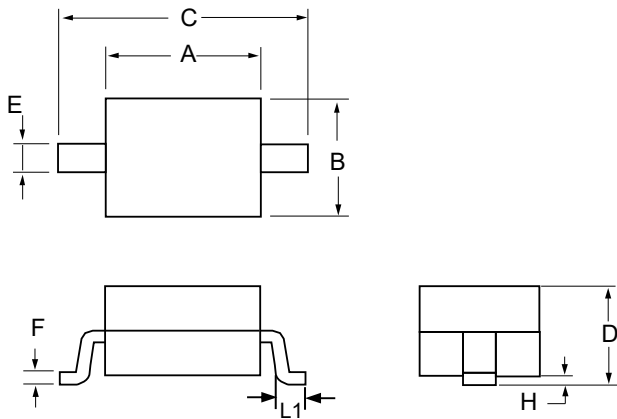
Fig 2. Typical Reverse Characteristics

Solder Reflow Recommendation

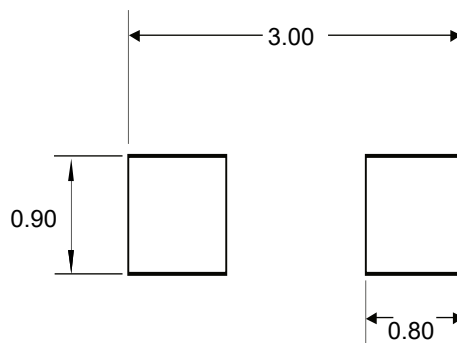


Remark: Pb free for 260°C; Pb for 245°C.

Product dimension (SOD-323)



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.063	0.075	1.60	1.90
B	0.045	0.057	1.15	1.45
C	0.091	0.106	2.30	2.70
D	0.031	0.039	0.80	1.00
E	0.010	0.016	0.25	0.40
F	0.004	0.007	0.09	0.18
H	0.000	0.004	0.00	0.10
L1	0.010	0.016	0.25	0.40



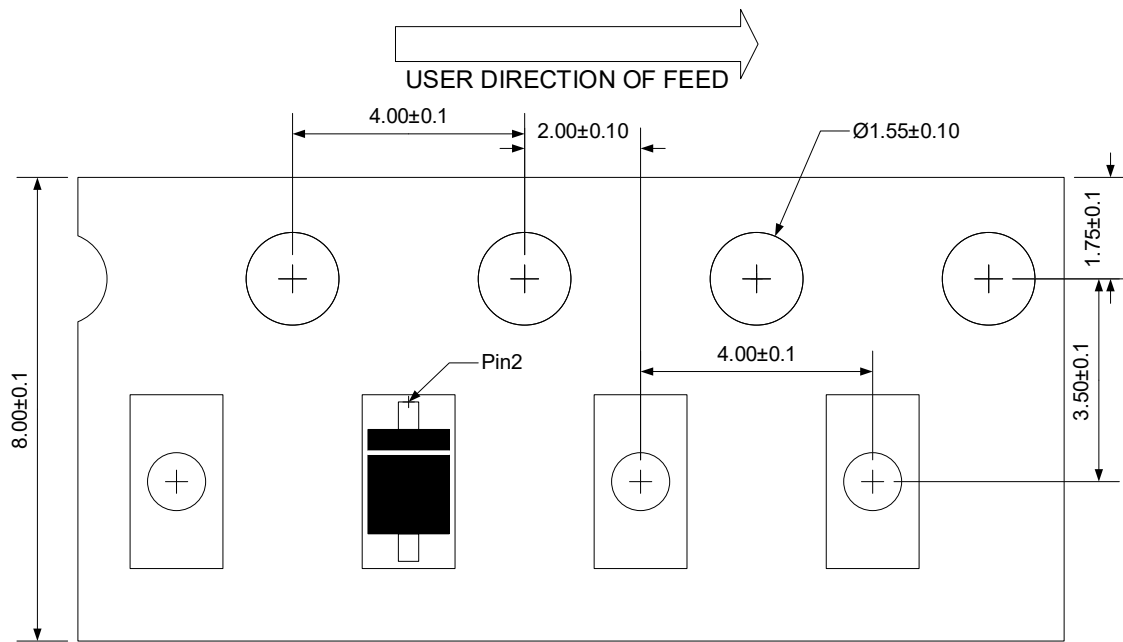
Suggested PCB Layout

Unit:mm

Ordering information


Device	Package	Reel	Shipping
PSBD3D40V03	SOD-323	7"	3000 / Tape & Reel

Load with information



Unit:mm


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