

Feature

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

Applications

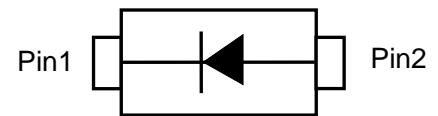
- Low current rectification

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 μm
- Pin flatness: $\leq 3\text{mil}$


Circuit Diagram

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.48	0.60	V	$I_F=1\text{A}$
Reverse current	I_R	-	8.0	50	μA	$V_R=40\text{V}$
Junction Capacitance	C_j	-		120	pF	$V_R=4\text{V}$ $f=1\text{MHz}$

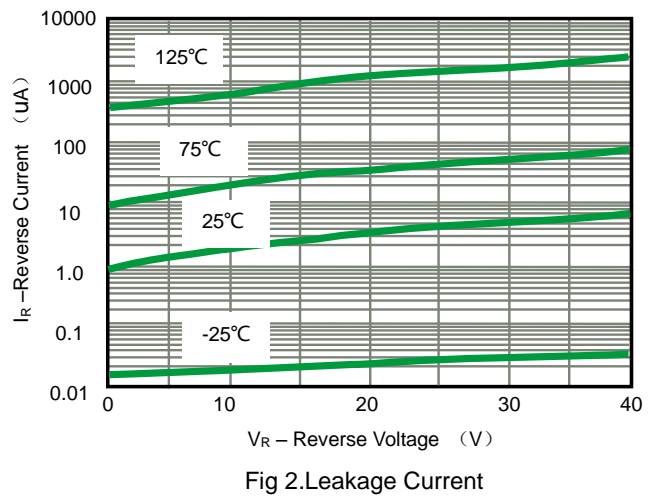
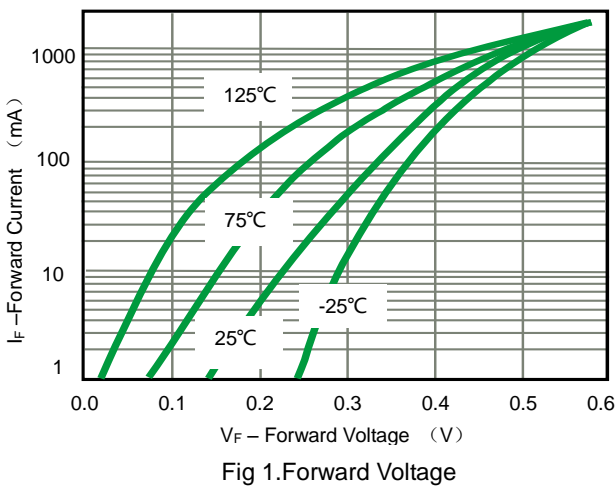
Absolute maximum rating@25°C

Parameter	Symbol	limits	Unit
Reverse voltage(repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_o	1.0	A

Absolute maximum rating@25°C

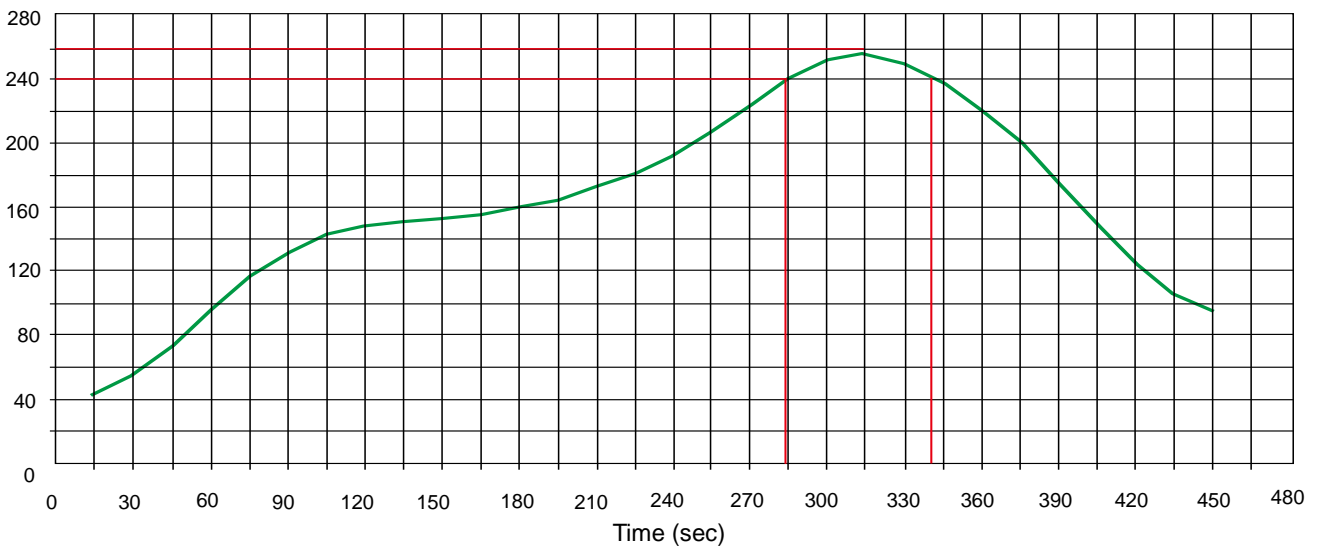
Parameter	Symbol	limits	Unit
Peak forward surge current(8.33ms 1/2sine waveform with single pulse)	I_{FSM}	9	A
Power Dissipation	PD	250	mW
Operating Junction temperature Range	T_j	-55 to 125	°C
Storage temperature	T_{stg}	-55 to 150	°C

Typical Characteristics

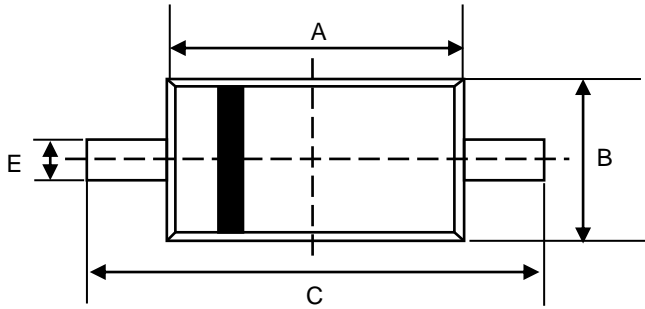


Solder Reflow Recommendation

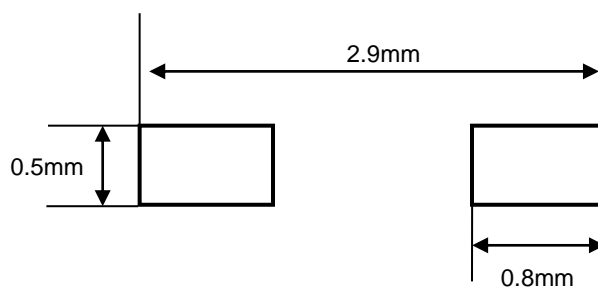
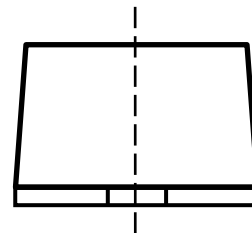
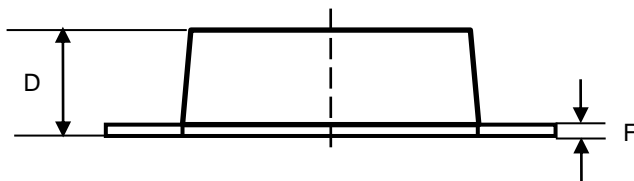
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Product dimension (SOD-323F)



Dim	Millimeters		
	MIN	TYP	MAX
A	1.60	1.70	1.80
B	1.15	1.25	1.35
C	2.30	2.50	2.70
D	0.60	0.70	0.80
E	0.20	0.30	0.40
F	0.08	0.13	0.18




Suggested PCB Layout

Ordering information

Device	Package	Reel	Shipping
PSBD3DF40V1H	SOD-323F(Pb-free)	7"	3000 / Tape & Reel


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