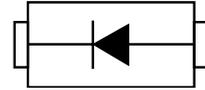


Feature

- 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

Electrical characteristics per line@25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.5	0.55	V	$I_F=1A$
Forward voltage	V_F	-	0.43	0.48	V	$I_F=0.5A$
Reverse current	I_R	-	-	0.1	mA	$V_R=40V$
Junction Capacitance	C_j	-	120	-	pF	$V_R=0V$ $f=1MHz$

Absolute maximum rating@25°C

Parameter	Symbol	limits	Unit
Reverse voltage(repetitive peak)	V_{RM}	45	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_o	1	A
Repetitive peak forward current	I_{FSRM}	25	A
Power Dissipation	PD	500	mW
Operating Junction temperature Range	T_j	-55 to 125	°C
Storage temperature	T_{stg}	-40 to +125	°C

Typical Characteristics

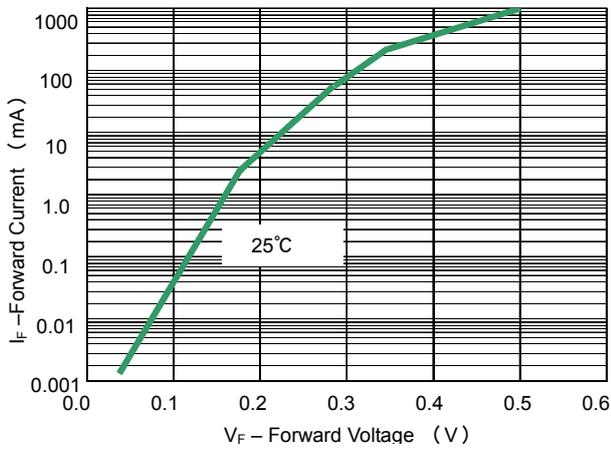


Fig 1. Forward Voltage

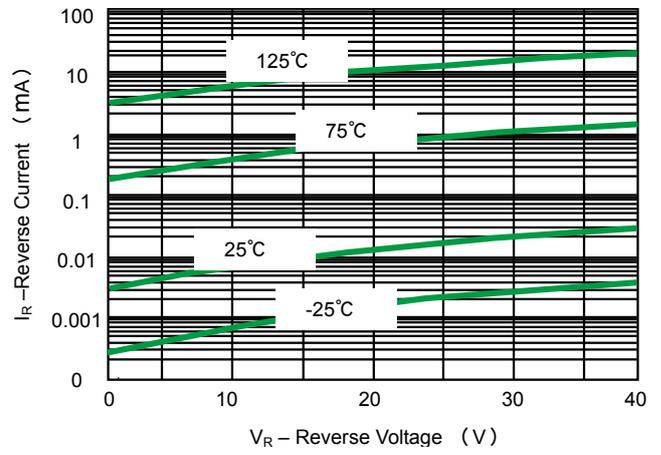
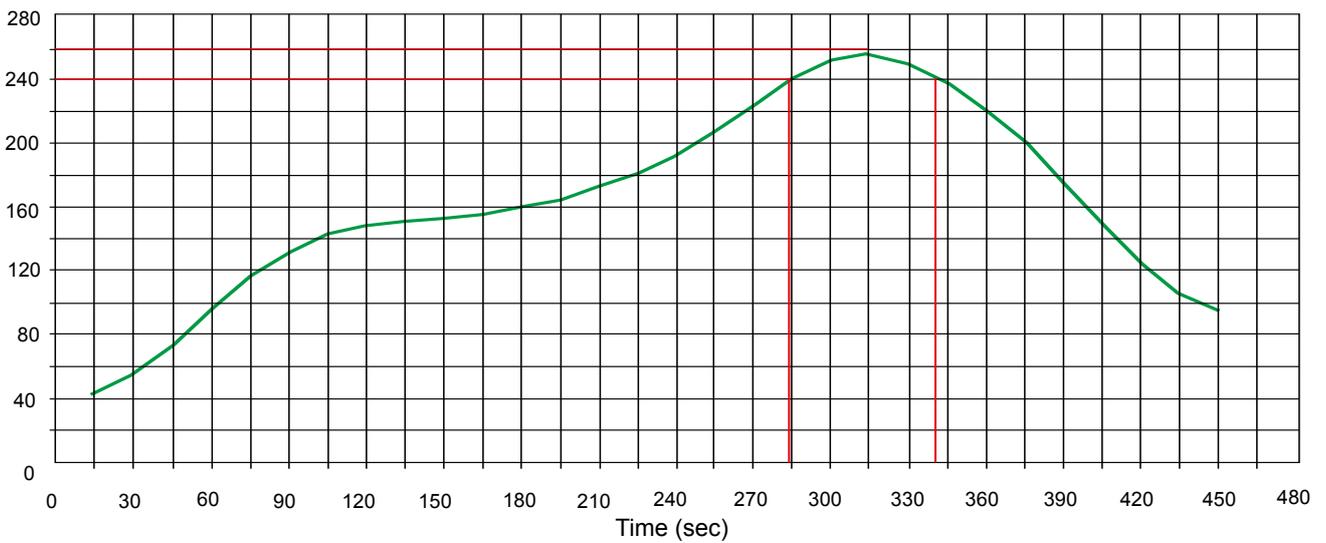


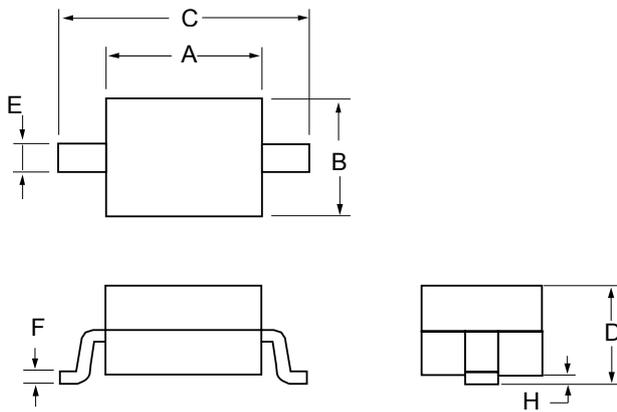
Fig 2. Leakage Current

Solder Reflow Recommendation

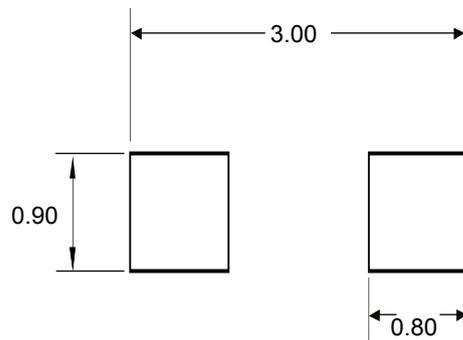
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



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	0.090	0.106	2.30	2.70
D	0.031	0.043	0.80	1.00
E	0.010	0.01	0.25	0.40
F	0.004	0.007	0.09	0.18
H	0.000	0.004	0.00	0.10



Unit:mm

Ordering information

Device	Package	Shipping
PSBD3D40V1H	SOD-323(Pb-free)	3000 / Tape & Reel

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