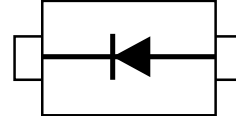


Feature

- 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
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 μm
- Pin flatness : $\leq 3\text{mil}$

Electrical characteristics per line@25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.47	V	$I_F=500\text{mA}$
Reverse current	I_R	-	-	100	μA	$V_R=20\text{V}$

Absolute maximum rating@25°C

Parameter	Symbol	limits	Unit
Reverse voltage (DC)	V_{RM}	40	V
Average rectified forward current	I_o	500	mA
Forward current surge peak (60Hz 1cyc)	I_{FSM}	2	A
Operating Junction temperature Range	T_j	-55 to 125	°C
Storage temperature	T_{stg}	-40 to +125	°C

Typical Characteristics

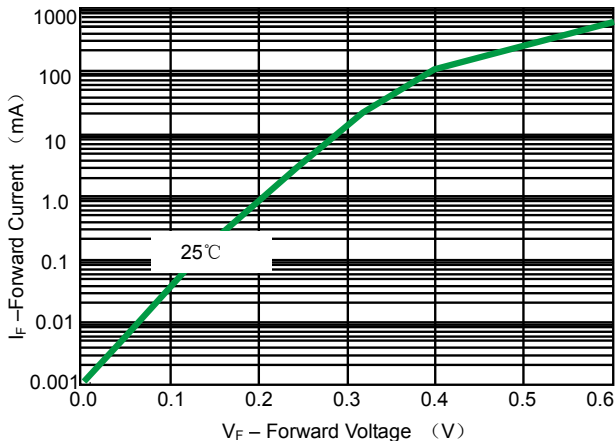


Fig 1. Forward Voltage

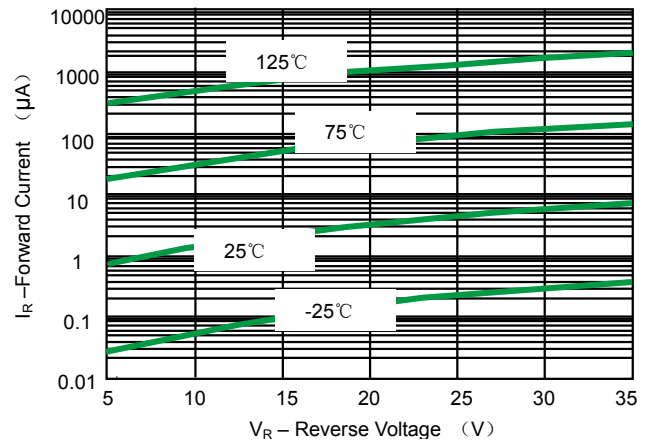


Fig 2. Leakage Current

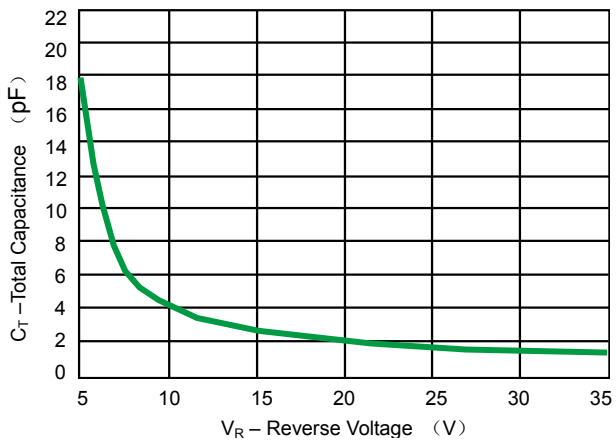
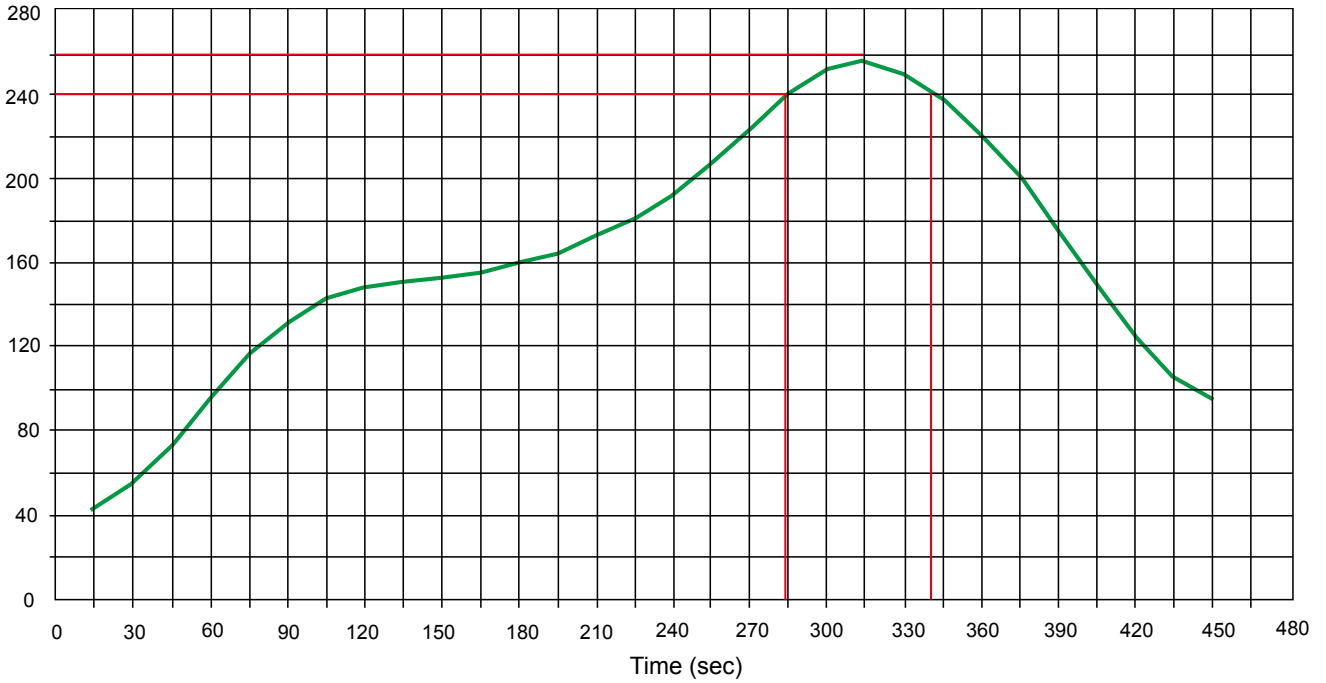


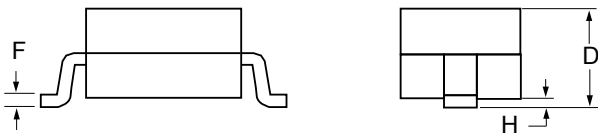
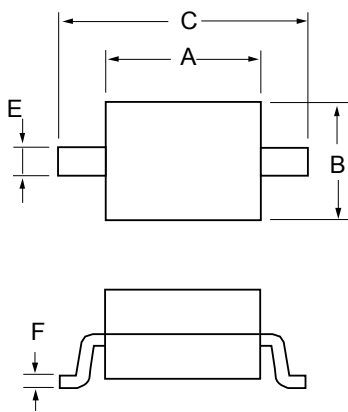
Fig 3. Total Capacitance

Solder Reflow Recommendation

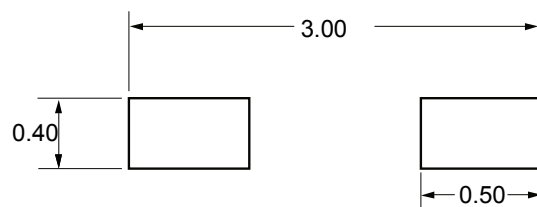
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



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	1.10
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
PSBD551V-40	SOD-323 (Pb-Free)	3000 / Tape & Reel


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