

Feature

- Ultra Small mold type. (SOD523)
- 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 um
- Pin flatness : ≤3mil

Electrical characteristics per line@25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.5	V	$I_F=200mA$
Reverse current	I_R	-	-	1	μA	$V_R=10V$

Absolute maximum rating@25°C

Parameter	Symbol	limits	Unit
Reverse voltage (DC)	V_{RM}	40	V
Average rectified forward current	I_o	200	mA
Forward current surge peak (60Hz 1cyc)	I_{FSM}	1	A
Operating Junction temperature Range	T_j	-55 to 125	°C
Storage temperature	T_{stg}	-40 to +125	°C

Typical Characteristics

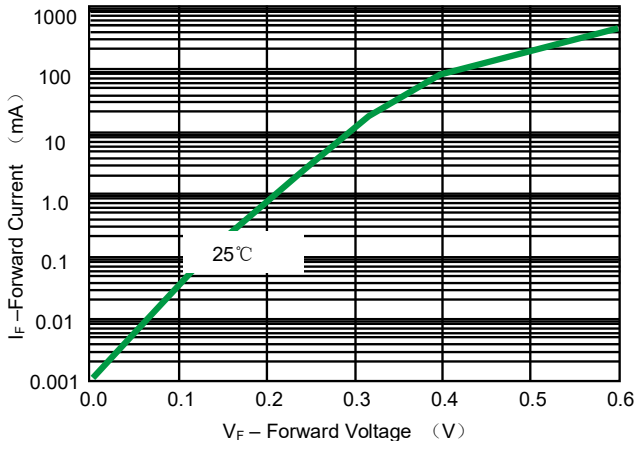


Fig 1. Forward Voltage

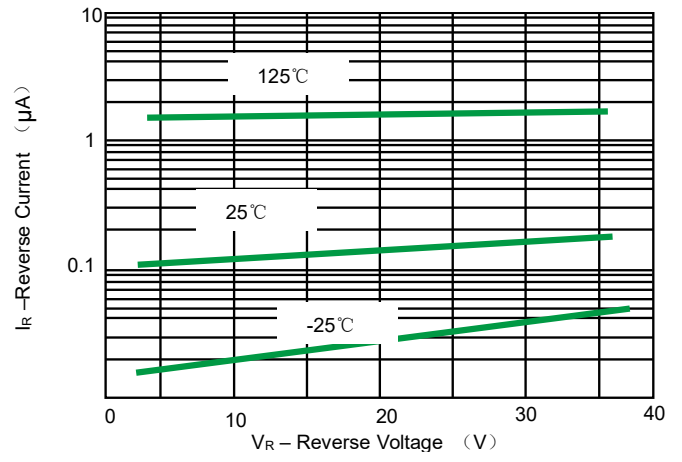


Fig 2. Leakage Current

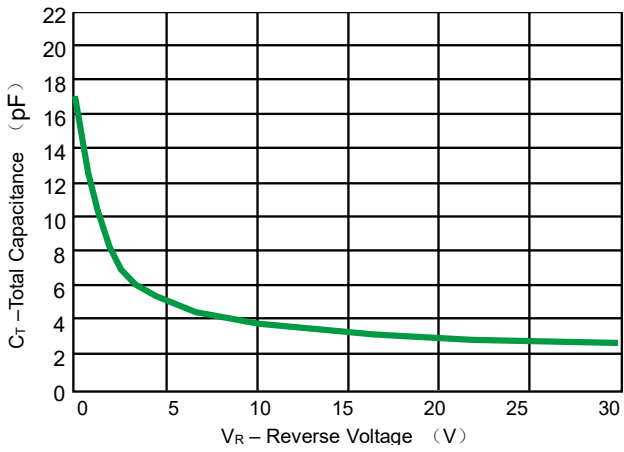
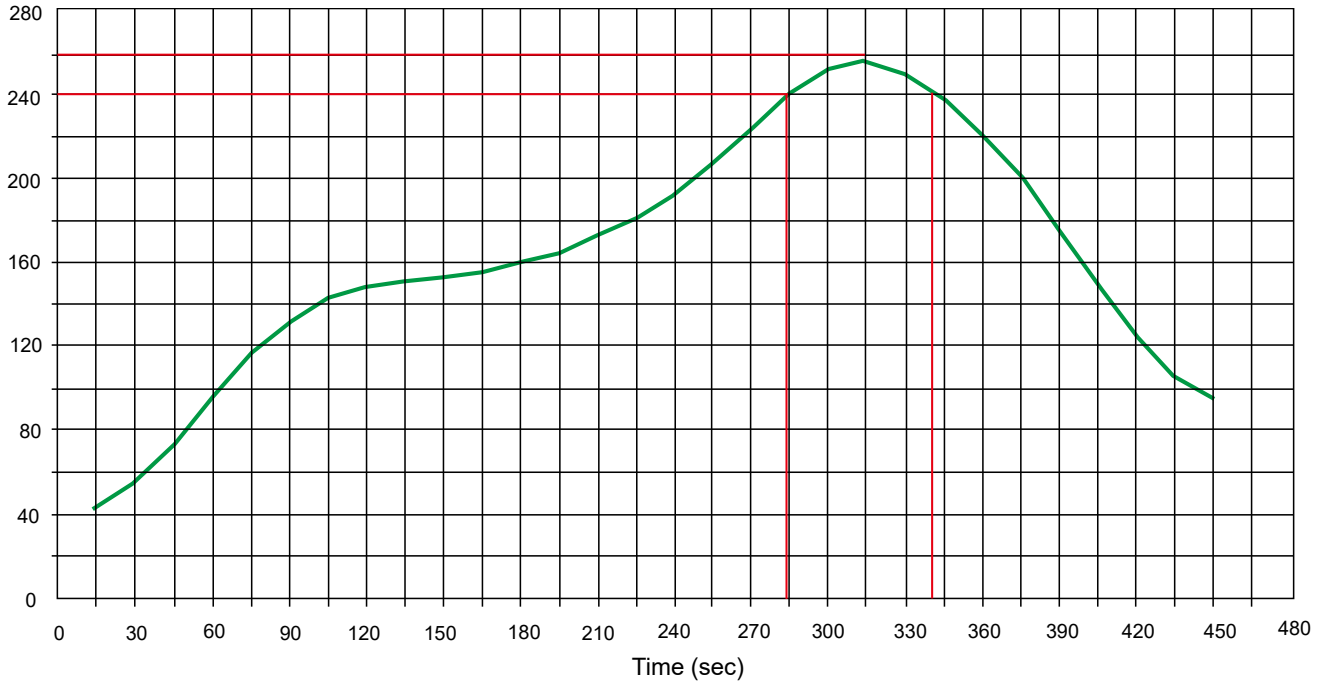


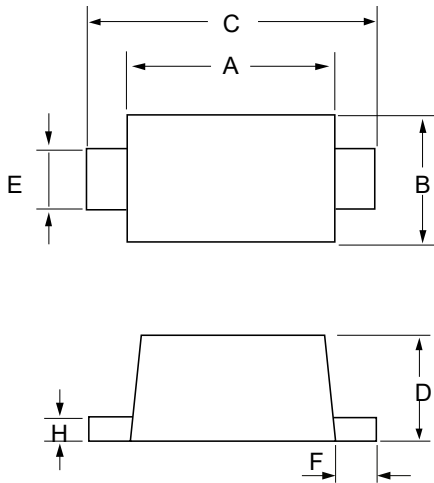
Fig 3. Total Capacitance

Solder Reflow Recommendation

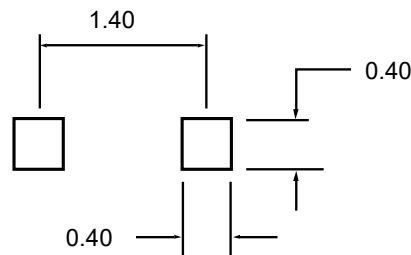
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Product dimension (SOD-523)



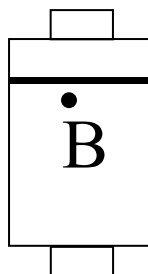
Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.043	0.051	1.10	1.30
B	0.028	0.035	0.70	0.90
C	0.059	0.067	1.50	1.70
D	0.020	0.028	0.50	0.70
E	0.010	0.014	0.25	0.35
F	0.006	0.010	0.15	0.25
H	0.0028	0.0079	0.07	0.20



Suggested PCB Layout

Unit:mm

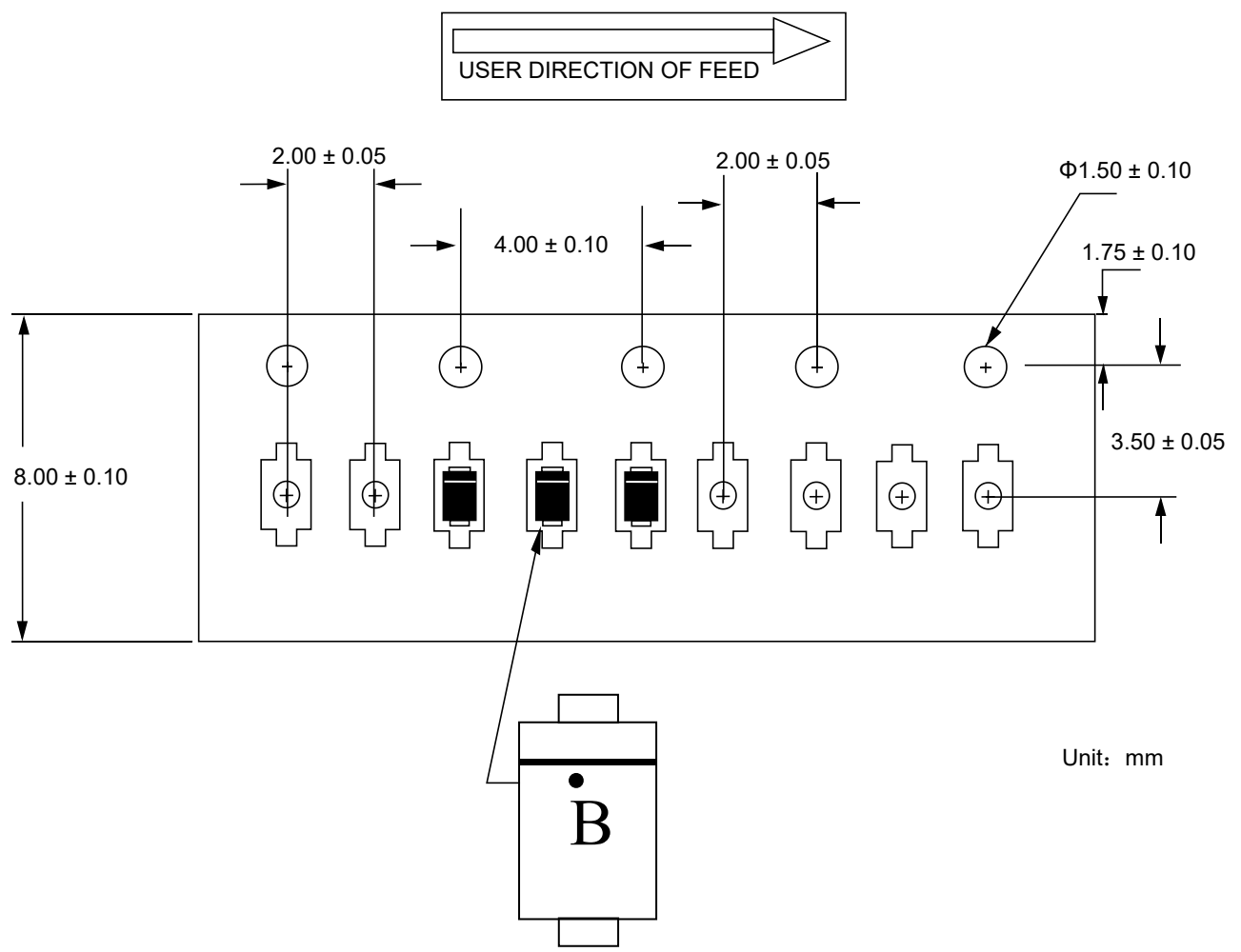
Marking information




Ordering information

Device	Package	Reel	Shipping
PSBD521S-40	SOD-523 (Pb-Free)	7"	3000 / Tape & Reel

Load with information




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