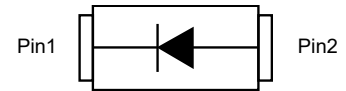


Feature

- Ultra Small mold type. (SOD523)
- Low I_R
- High reliability.



Circuit Diagram

Applications

- Low current rectification



Marking

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: $\leq 3\text{mil}$

Construction

- Silicon epitaxial planar

Electrical characteristics per line@25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.5	V	$I_F=200\text{mA}$
Reverse current	I_R	-	-	30	μA	$V_R=10\text{V}$

Absolute maximum rating@25°C

Parameter	Symbol	limits	Unit
Reverse voltage (DC)	V_{RM}	30	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

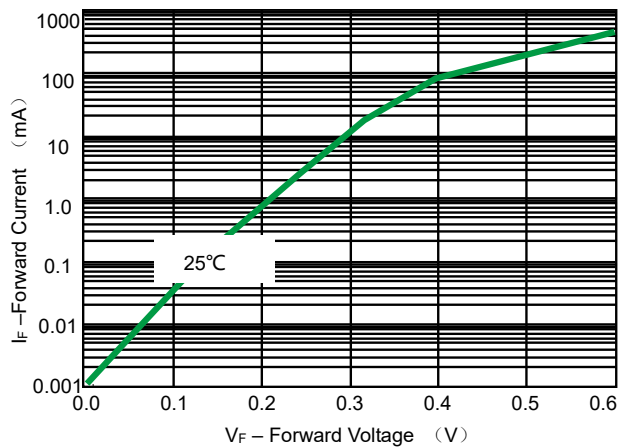


Fig 1. Forward Voltage

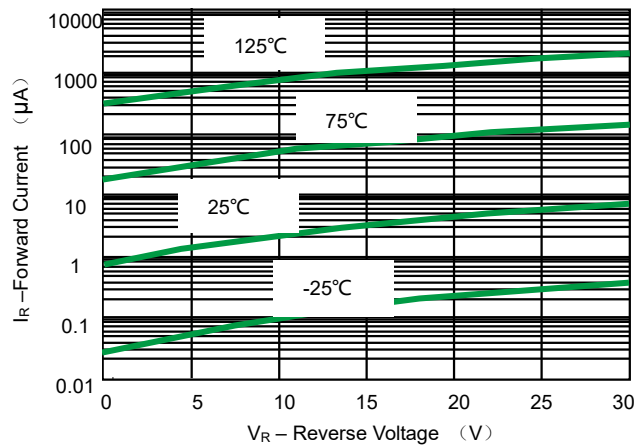


Fig 2. Leakage Current

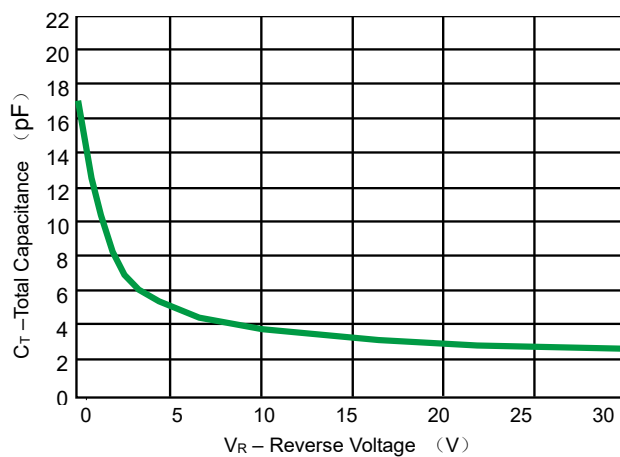
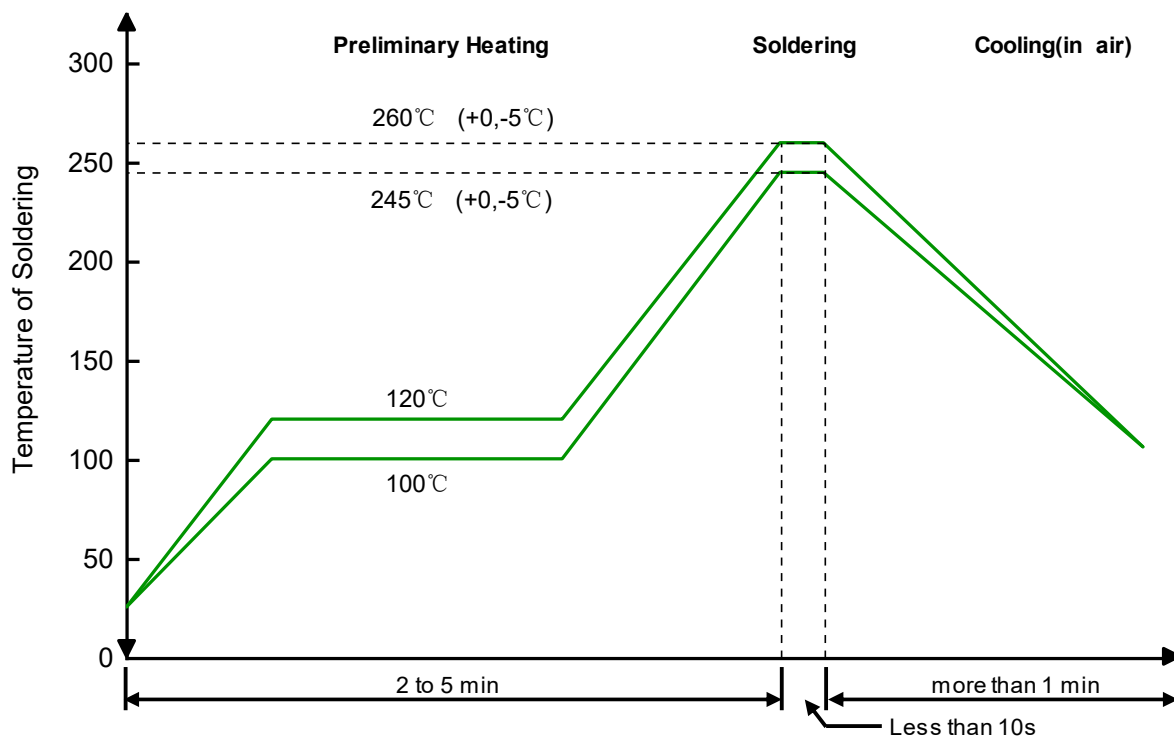


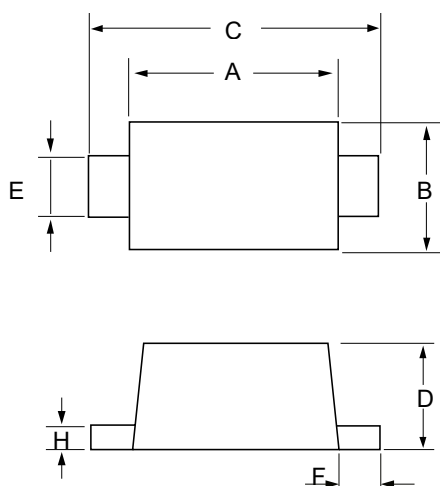
Fig 3. Total Capacitance

Solder Reflow Recommendation

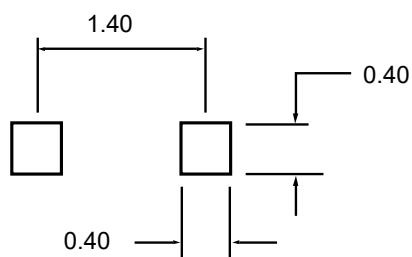


Remark: Pb free for 260°C; Pb for 245°C.

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	0.016	0.028	0.40	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

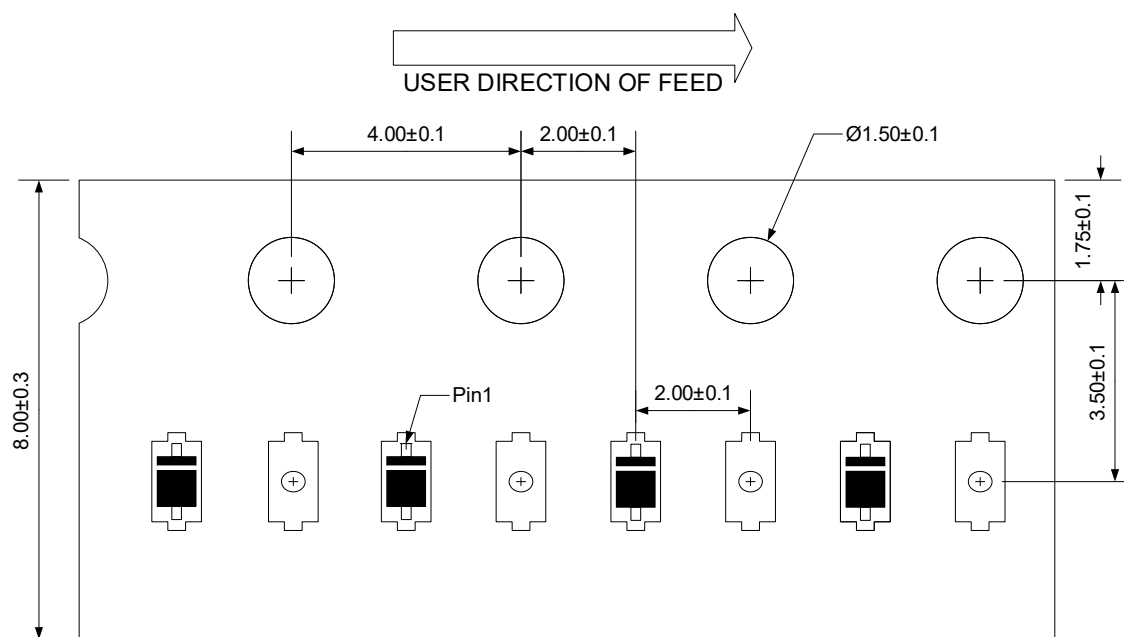


Unit: mm

Ordering information


Device	Package	Shipping
PSBD521S-30	SOD-523	3000 / Tape & Reel

Load with information



Unit:mm


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