

**Feature**

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

**Applications**

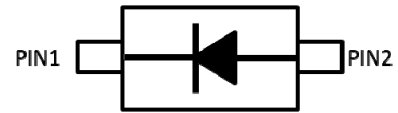
- Low current rectification

**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  $\mu\text{m}$
- 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	$V_F$	-	-	0.6	V	$I_F=200\text{mA}$
Reverse current	$I_R$	-	-	1	$\mu\text{A}$	$V_R=10\text{V}$

**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

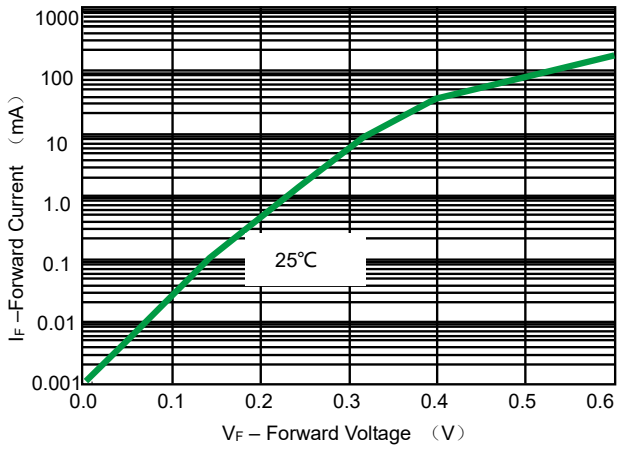


Fig 1. Forward Voltage

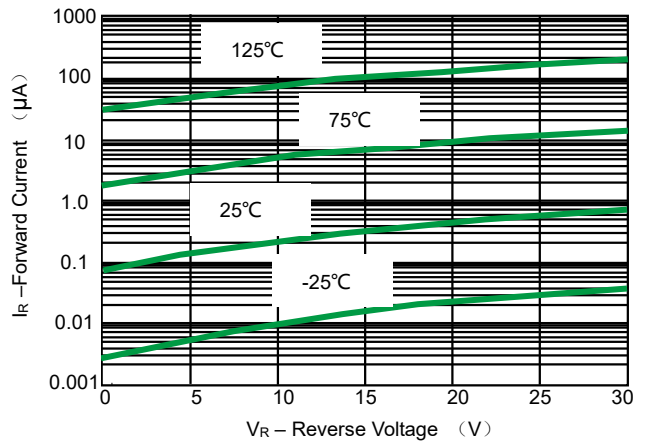


Fig 2. Leakage Current

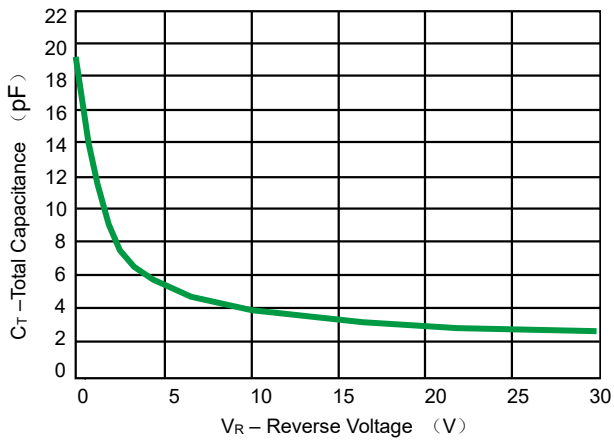
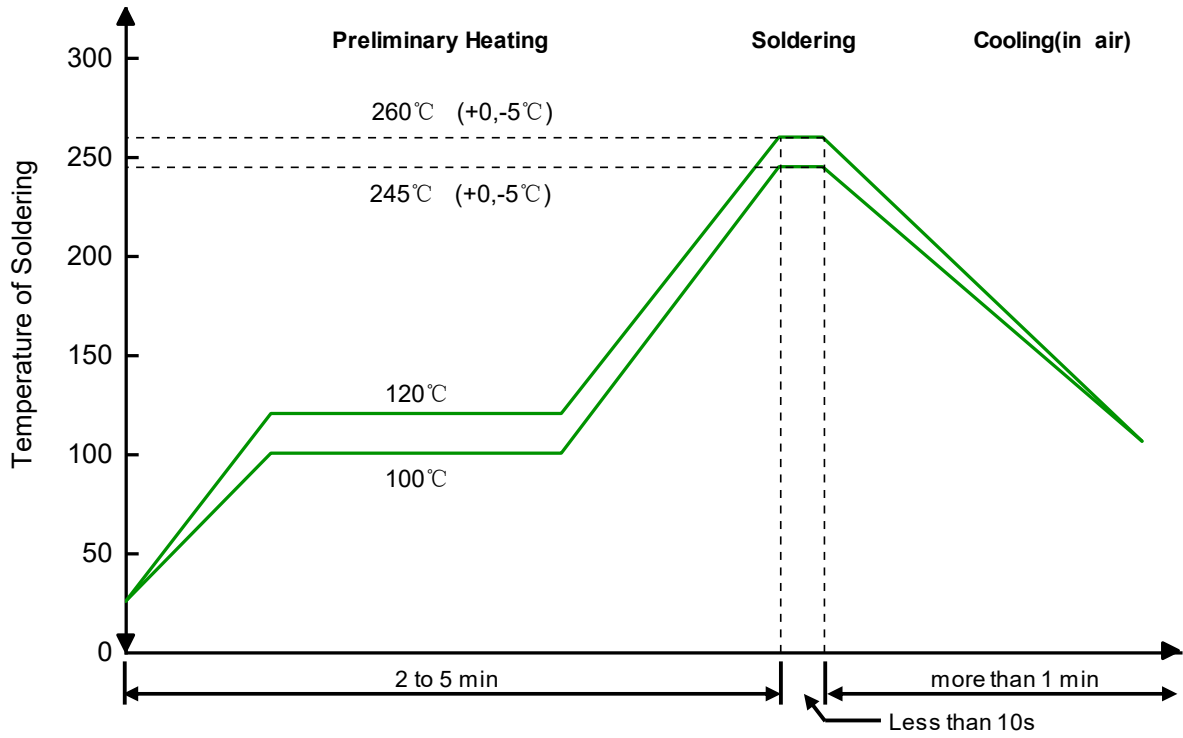


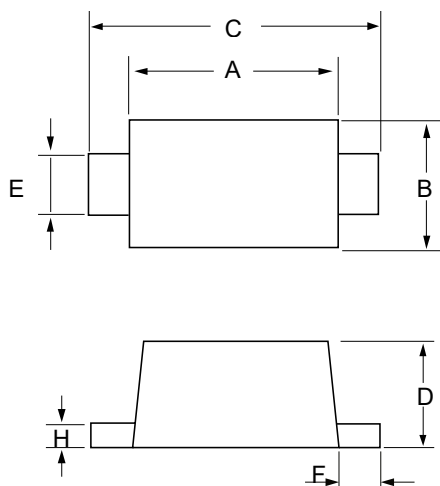
Fig 3. Total Capacitance

Solder Reflow Recommendation

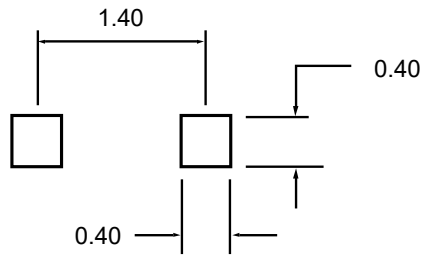


Remark: Pb free for 260°C; Pb for 245°C.

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

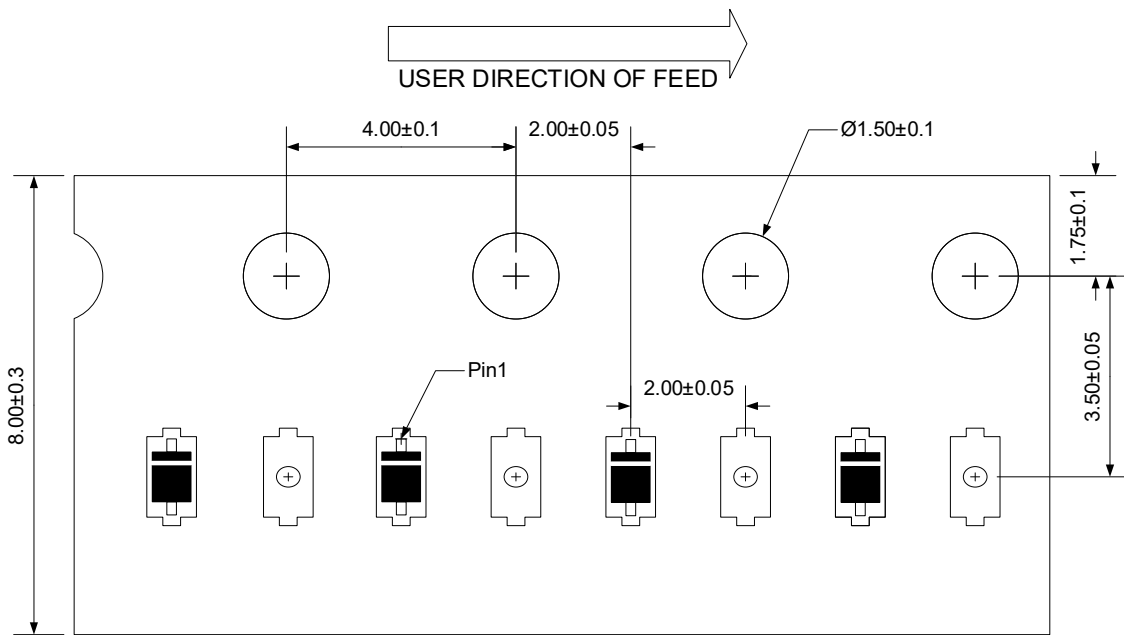


Unit:mm

Ordering information


Device	Package	Shipping
PSBD520S-30	SOD-523	3000 / Tape & Reel

Load With information



Unit:mm


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