

# Schottky Barrier diode

#### **Feature**

- ➤ Ultra Small mold type. (SOD523)
- Low I<sub>R</sub>
- > 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℃

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	V <sub>F</sub>	-	-	0.5	V	I <sub>F</sub> =200mA
Reverse current	I <sub>R</sub>	-	-	30	μΑ	V <sub>R</sub> =10V

## Absolute maximum rating@25℃

Parameter	Symbol	limits	Unit
Reverse voltage (DC)	$V_{RM}$	30	٧
Average rectified forward current	Io	200	mA
Forward current surge peak (60Hz 1cyc)	I <sub>FSM</sub>	1	А
Operating Junction temperature Range	Tj	-55 to 125	$^{\circ}$ C
Storage temperature	$T_{stg}$	-40 to +125	$^{\circ}$

# **Typical Characteristics**

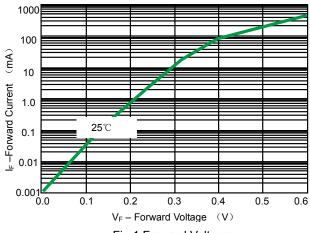


Fig 1.Forward Voltage

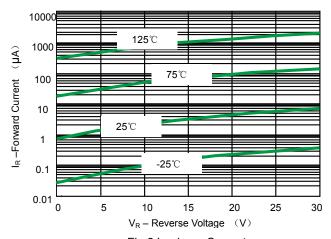


Fig 2.Leakage Current

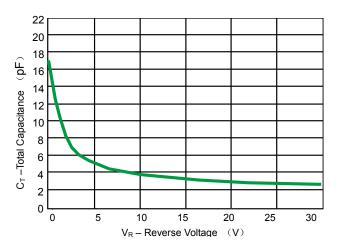
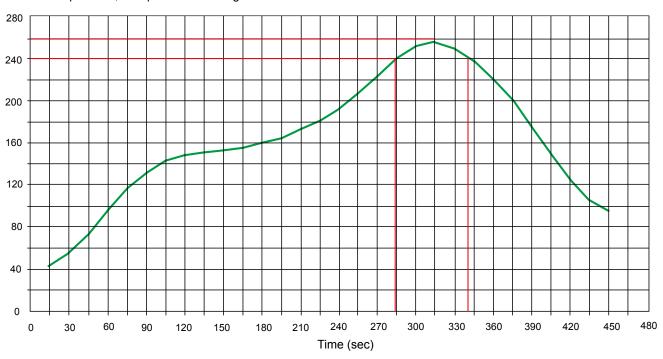


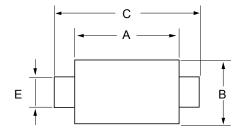
Fig 3.Total Capacitance

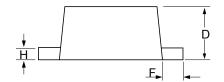
#### **Solder Reflow Recommendation**

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

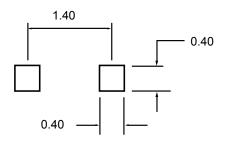


### **Product dimension (SOD-523)**





Dim	Inc	hes	Millimeters		
	MIN	MAX	MIN	MAX	
Α	0.043	0.051	1.10	1.30	
В	0.028	0.035	0.70	0.90	
С	0.059	0.067	1.50	1.70	
D	0.020	0.028	0.50	0.70	
Е	0.010	0.014	0.25	0.35	
F	0.006	0.010	0.15	0.25	
Н	0.0028	0.0079	0.07	0.20	



Unit:mm

# Ordering information

Device	Package	Shipping	
PSBD521S-30	SOD-523 (Pb-Free)	3000 / Tape & Reel	

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