

# Schottky Barrier Diode

### **Feature**

- Ultra Small mold type. SOD-923
- Low I<sub>R</sub>
- > High reliability.

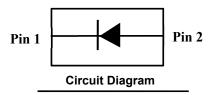
### **Applications**

Low current rectification

# SOD-923(Top View)

### **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.	Тур.	Max.	Unit	Conditions
Forward voltage	VF	-	0.27	0.31	V	I <sub>F</sub> =1mA
Forward voltage	V <sub>F</sub>	-	0.30	0.35	V	I <sub>F</sub> =10mA
Forward voltage	VF		0.36	0.40	V	I <sub>F</sub> =20mA
Forward voltage	VF	-	0.48	0.55	V	I <sub>F</sub> =100mA
Reverse current	I <sub>R</sub>	-	-	1.5	μΑ	V <sub>R</sub> =10V

# Absolute maximum rating@25℃

Parameter	Symbol	limits	Unit
Reverse voltage (DC)	V <sub>RM</sub>	30	V
Average rectified forward current	I <sub>o</sub>	100	mA
Forward current surge peak (60Hz 1cyc)	IFSM	500	mA
Operating Junction temperature Range	Tj	-55 to 125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

# Typical Characteristics

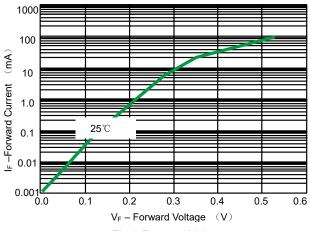


Fig 1.Forward Voltage

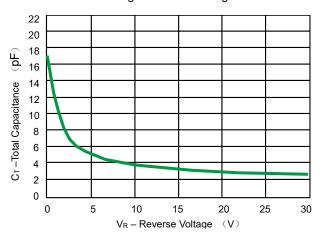
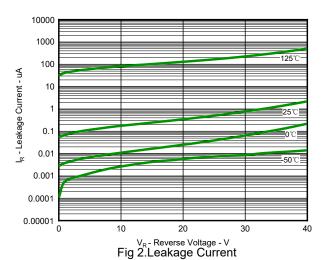
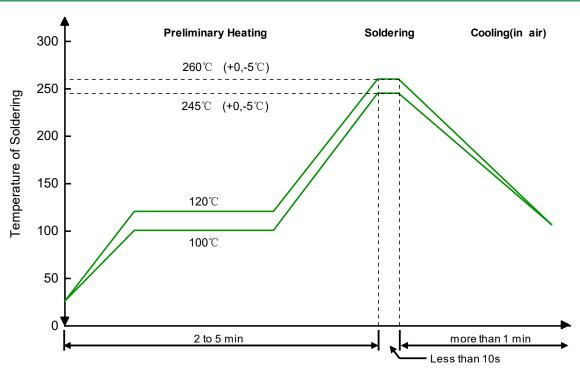


Fig 3.Total Capacitance

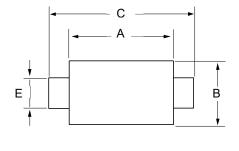


## **Solder Reflow Recommendation**



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

## **Product dimension (SOD-923)**



\ D	F	
H — — — —	Н	
F		•
0.50		
0.60	+	
◆ 0.70	<b></b>	

Suggested PCB Layout

Dim	Inc	hes	Millimeters		
	MIN	MAX	MIN	MAX	
Α	0.030	0.033	0.75	0.85	
В	0.022	0.026	0.55	0.65	
С	0.037	0.041	0.95	1.05	
D	0.014	0.017	0.36	0.43	
E	0.006	0.010	0.15	0.25	
F	0.002	0.006	0.05	0.15	
Н	0.003	0.007	0.07	0.17	

Unit:mm

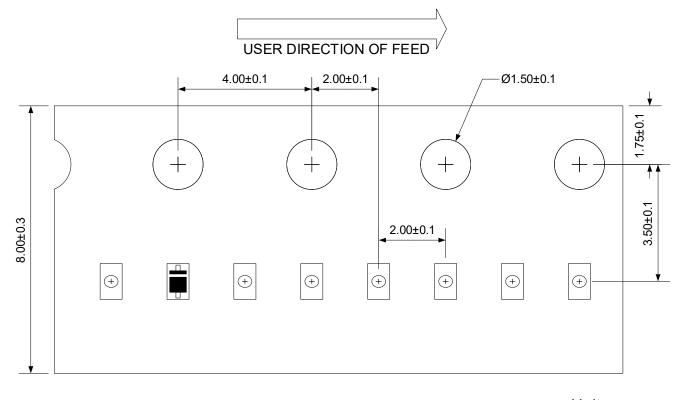
# Ordering information

Device	Package	Reel	Shipping
PSBD9D30V01	SOD-923	7"	8000 / Tape & Reel

## Marking



# Load with information



Unit:mm

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