

## SSCSBAT54D3

### Schottky Barrier Diode

- **Features**

- ✧ Extremely fast switching speed
- ✧ Low forward voltage
- ✧ Very small conduction losses

- **Applications**

- ✧ Ultra high-speed switching
- ✧ Voltage clamping
- ✧ Protection circuits
- ✧ Blocking diodes

- **PIN configuration**



**SOD-523**



**Circuit Diagram**



**Marking(Top View)**

- **Absolute maximum rating @T<sub>A</sub>=25°C**

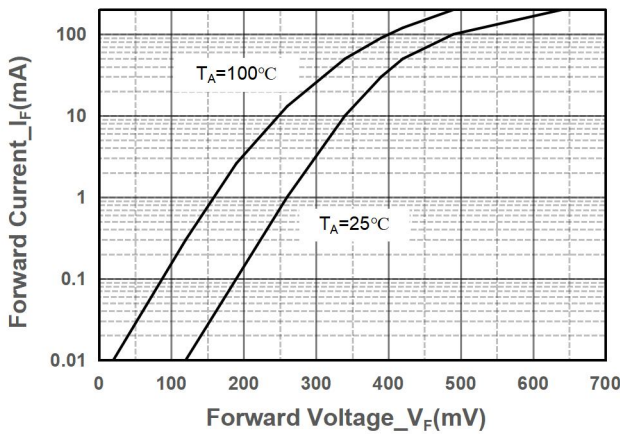
Parameter	Symbol	Value	Unit
Reverse Voltage(DC)	V <sub>R</sub>	30	V
Average Rectified Forward Current	I <sub>FM</sub>	300	mA
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I <sub>FSM</sub>	600	mA
Power Dissipation	P <sub>D</sub>	200	mW
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	500	°C/W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	°C



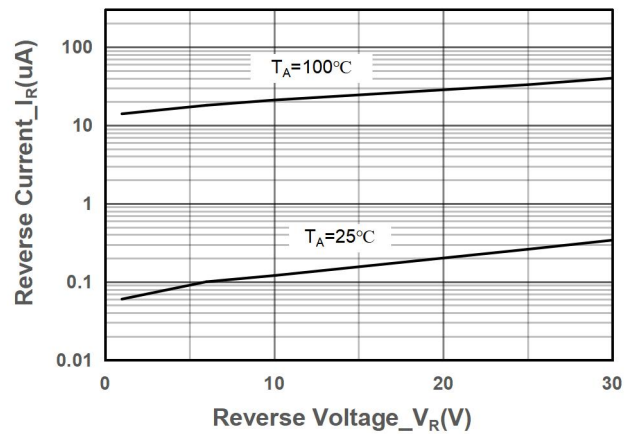
● Electrical Characteristics @T<sub>A</sub>=25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V <sub>R</sub>	I <sub>R</sub> = 100uA	30			V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 0.1mA			0.24	V
		I <sub>F</sub> = 1mA			0.32	V
		I <sub>F</sub> = 10mA			0.40	V
		I <sub>F</sub> = 30mA			0.50	V
		I <sub>F</sub> = 100mA			1.00	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 25V			2.0	uA
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =1V,f=1MHz			10	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA,R <sub>L</sub> =100Ω,I <sub>RR</sub> =0.1I <sub>R</sub>			5.0	ns

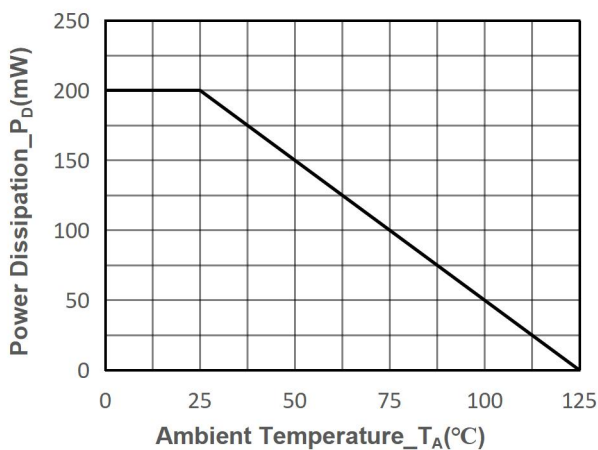
● Typical Performance Characteristics



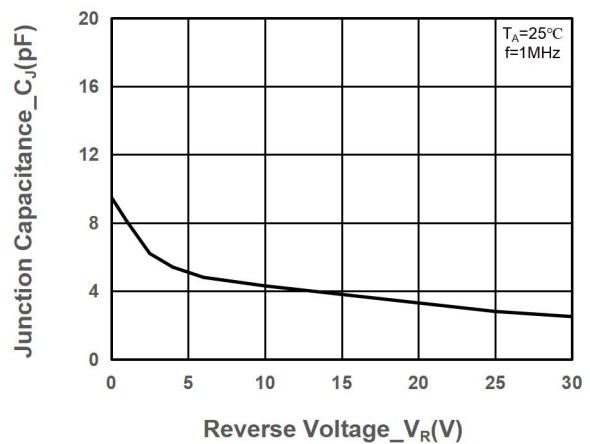
Forward Current vs. Forward Voltage



Reverse Current vs. Reverse Voltage



Power Derating vs. Ambient Temperature



Junction Capacitance vs. Reverse Voltage



## ● Package Information

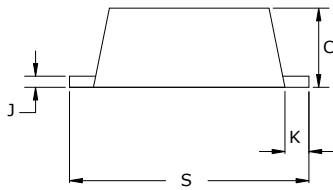
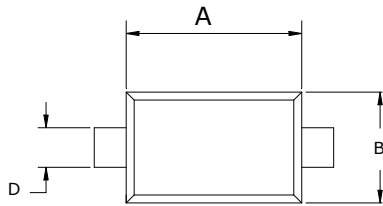
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSBAT54D3	SOD-523	JV	3000	7 Inch

### Mechanical Data

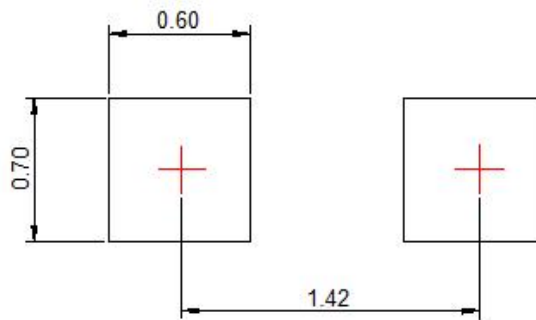
Case: SOD-523

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters	
	Min	Max
A	1.10	1.30
B	0.75	0.85
C	0.51	0.70
D	0.25	0.35
J	0.08	0.15
K	0.15	0.25
S	1.50	1.70

### Recommended Pad outline(Unit: mm)





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