



SSCSBAT46D2

Schottky Barrier Diode

● Features

- ◇ High breakdown voltage
- ◇ Low turn-on voltage
- ◇ Guard ring construction for transient protection

● PIN configuration



SOD-323

● Applications

- ◇ Low Voltage Rectification
- ◇ High-Efficiency DC-DC Conversion
- ◇ Switch Mode Power Supply
- ◇ Inverse Polarity Protection



Circuit Diagram



Marking

● Absolute maximum rating @ $T_A=25^{\circ}\text{C}$

Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	100	V
DC Blocking Voltage	V_R		
Forward Continuous Current	I_F	150	mA
Repetitive Peak Forward Current @ $t<1.0\text{s}$	I_{FRM}	350	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	750	mA
Power Dissipation	P_D	200	mW
Typical Thermal Resistance	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Operating Temperature	T_J	125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~ +150	$^{\circ}\text{C}$

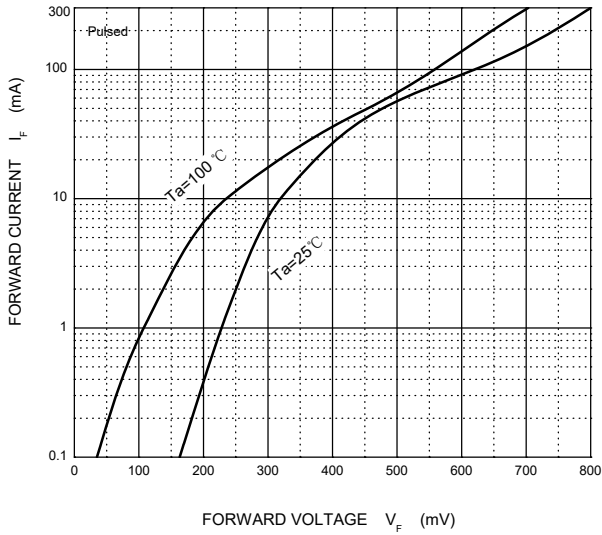


Electrical Characteristics @T_A=25°C

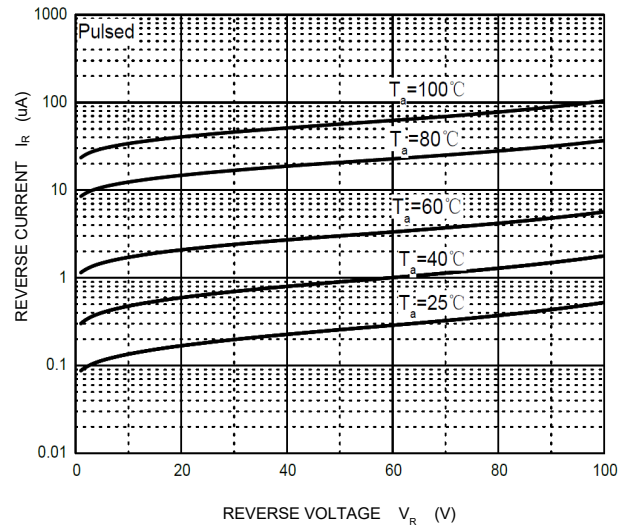
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V _R	I _R = 100μA	100			V
Forward Voltage	V _F	I _F = 0.1mA			0.25	V
		I _F = 10mA			0.45	
		I _F = 250mA			1	
Reverse Current	I _R	V _R = 1.5V			0.3	uA
		V _R = 10V			0.5	
		V _R = 50V			1.0	
		V _R = 75V			2.0	
Junction Capacitance	C _J	V _R = 1V, f = 1MHz		12		pF

Typical Performance Characteristics

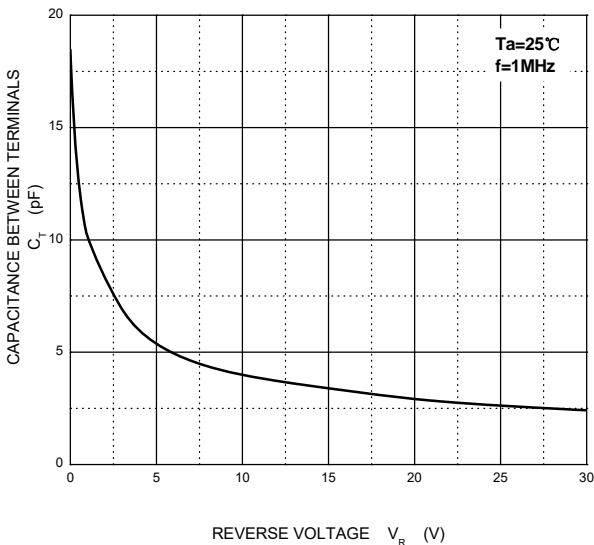
Forward Characteristics



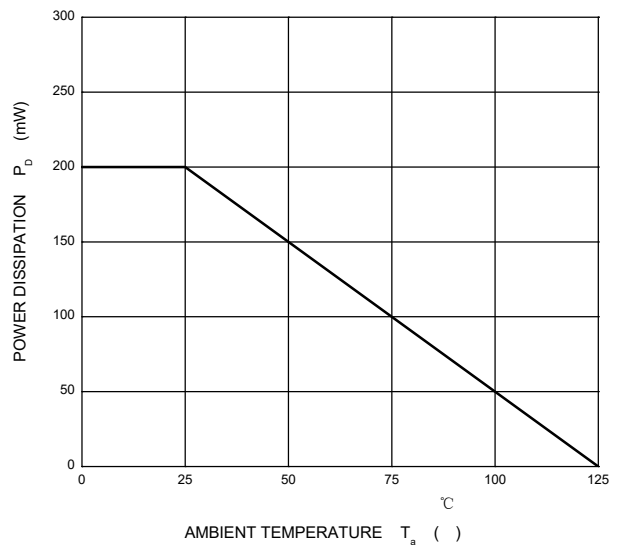
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve





● Package Information

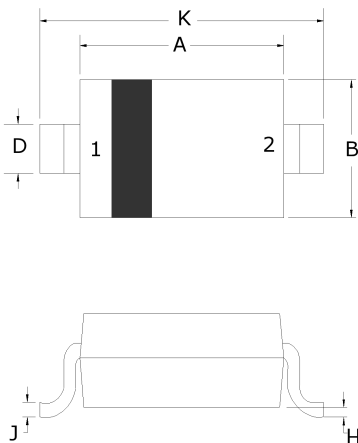
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSBAT46D2	SOD-323	S9	3000	7 Inch

Mechanical Data

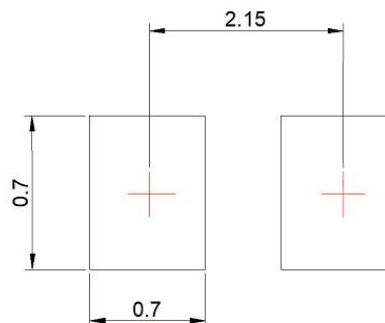
Case: SOD-323

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters	
	Min	Max
A	1.60	1.80
B	1.2	1.40
C	0.80	0.90
D	0.25	0.35
E	0.15REF	
H	0	0.10
J	0.08	0.15
K	2.50	2.70

Recommended Pad outline (Unit: mm)





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