



SSCSBAT46D1

Schottky Barrier Diode

● Features

- ✧ Low Forward Voltage Drop
- ✧ Guard Ring Construction for Transient Protection
- ✧ High Conductance
- ✧ Also Available in Lead Free Version

● PIN configuration



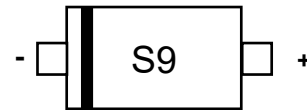
SOD-123

● 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°C

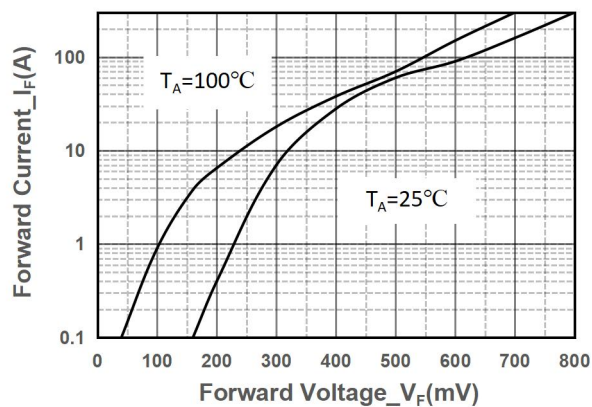
Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Average Forward Rectified Current	I _{FM}	350	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	750	mA
Typical Thermal Resistance	R _{θJA}	200	°C/W
Power Dissipation	P _D	500	mW
Junction temperature	T _J	125	°C
Storage Temperature	T _{STG}	-50 ~ +150	°C



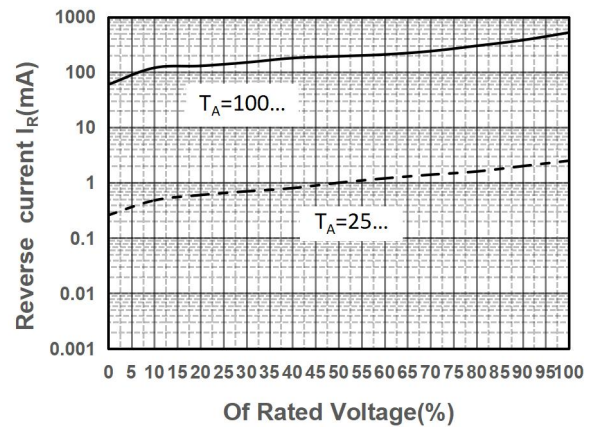
● Electrical Characteristics @T_A=25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	VF1	IF=0.1mA			250	mV
	VF2	IF=10mA			450	
	VF3	IF=250mA			1000	
Reverse voltage	VR	IR=100uA	100			V
Reverse current	IR	VR1=1.5V			0.3	uA
		VR2=10V			0.5	
		VR3=50V			1.0	
		VR4=75V			2.0	
Junction capacitance	CT	VR=0V,f=1MHz		20		pF
		VR=1.0V,f=1MHz		12		

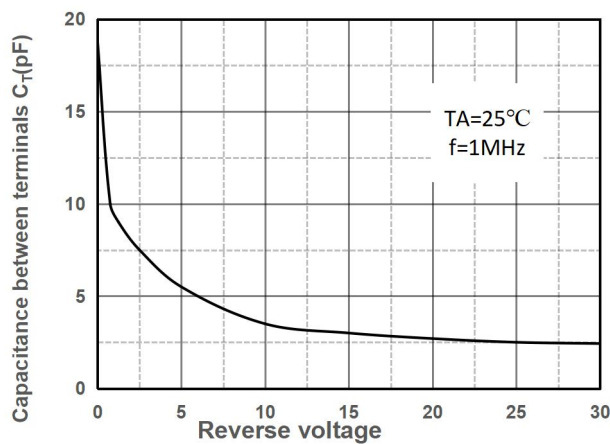
● Typical Performance Characteristics



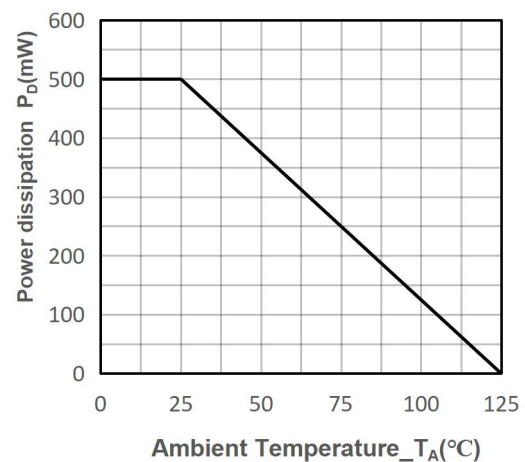
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power derating curve



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● Package Information

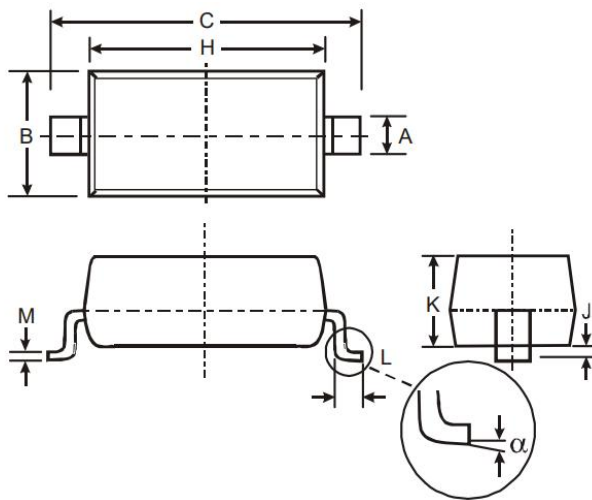
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSBAT46D1	SOD-123	S9	3000	7 Inch

Mechanical Data

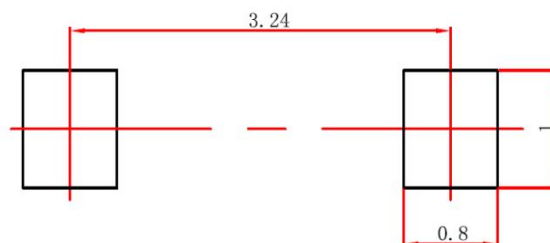
Case: SOD-123

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters	
	Min	Max
A	0.45	0.65
B	1.50	1.70
C	3.55	3.85
H	2.6	2.8
J	0.00	0.10
K	1.05	1.15
L	0.25	0.45
M	0.08	0.15
α	0	8°

Recommended Pad outline (Unit: mm)

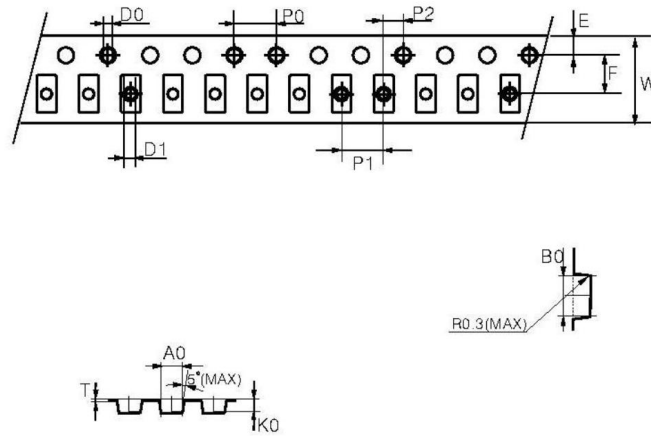




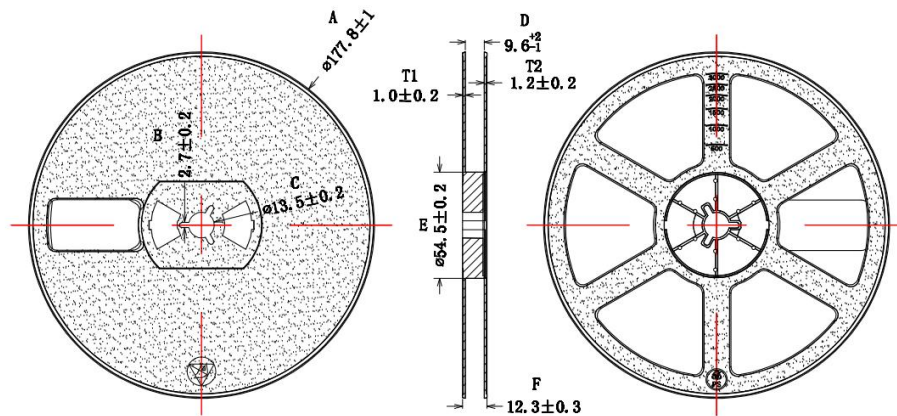
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SOD-123 Tape and reel

SOD-123 Embossed Carrier Tape



Symbol	A0	B0	K0	P0	P1	P2
Spec	1.78±0.10	3.85±0.10	1.33±0.10	4.00±0.10	4.00±0.10	2.00±0.10
Symbol	W	T	E	F	D0	D1
Spec	8.00±0.10	0.23±0.05	1.75±0.10	3.50±0.10	1.5+0.10 -0.00	1.00±0.10 -0.00



A±1	B±0.2	C±0.2	D ⁺² ₋₁	E±0.2	F±0.3	T1±0.2	T2±0.2
Φ177.8	2.7	Φ13.5	9.6	Φ54.5	12.3	1.0	1.2



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