



## SSCS160M30D1

### Schottky Barrier Diode

#### ● Features

- ✧ Low Forward Voltage Drop (VF)
- ✧ Better Efficiency and Low Power Losses,
- ✧ Guard Ring Construction for Transient Protection

#### ● PIN configuration



**SOD-123**

#### ● Applications

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



**Circuit Diagram**



**Marking(Top View)**

#### ● Absolute maximum rating @T<sub>A</sub>=25°C

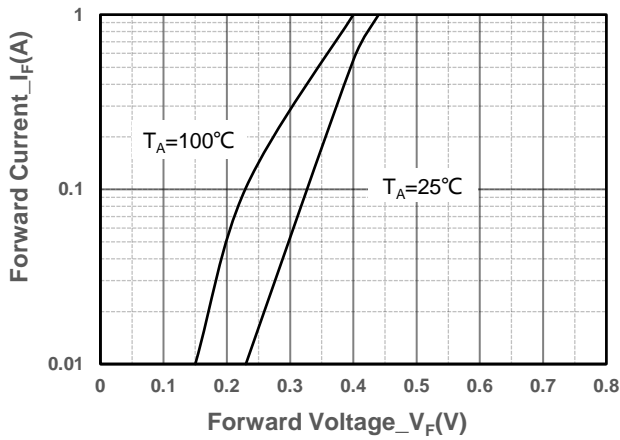
Parameter	Symbol	Value	Unit
Reverse Voltage (Repetitive Peak)	V <sub>RRM</sub>	30	V
DC Reverse Voltage	V <sub>R</sub>		
Reverse Voltage	V <sub>R(RMS)</sub>	24	V
Average Rectified Output Current	I <sub>O</sub>	1	A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	15	A
Power Dissipation	P <sub>D</sub>	350	mW
Thermal Resistance Junction to Ambient(Typ)	R <sub>θJA</sub>	170	°C/W
Operating Temperature	T <sub>J</sub>	-55 ~ +125	°C
Storage Temperature	T <sub>STG</sub>	-40 ~ +125	°C

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

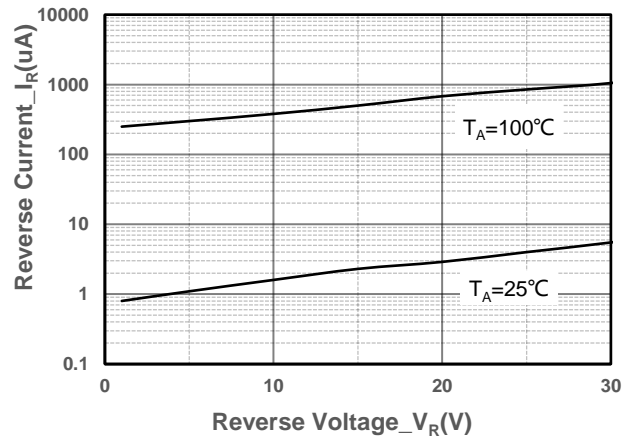
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> = 250uA	30			V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 0.5A		0.38	0.45	V
		I <sub>F</sub> = 1A		0.43	0.48	
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 15V		2	20	uA
		V <sub>R</sub> = 30V		5	50	uA
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =4V,f=1MHz		50		pF



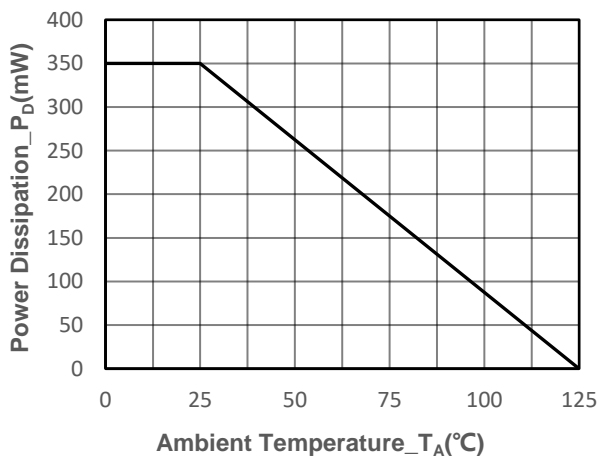
## ● Typical Performance Characteristics



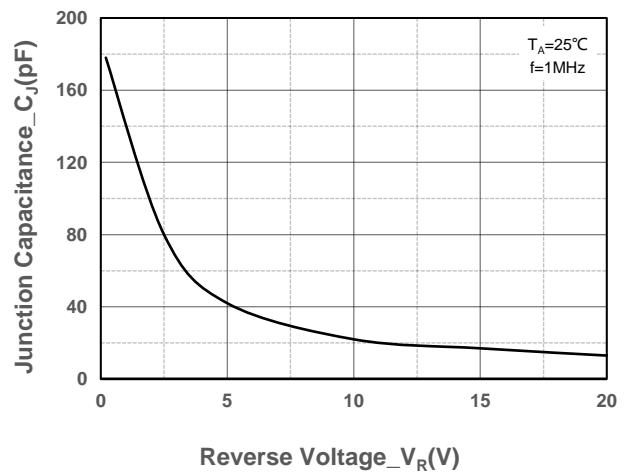
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Junction Capacitance vs. Reverse Voltage



## ● Package Information

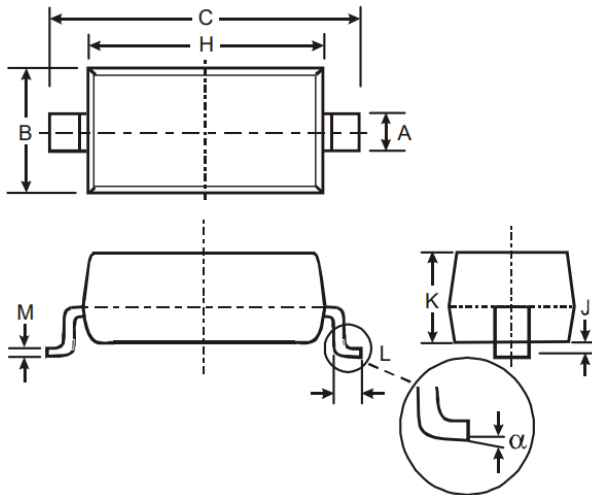
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCS160M30D1	SOD-123	73	3000	7 Inch

### Mechanical Data

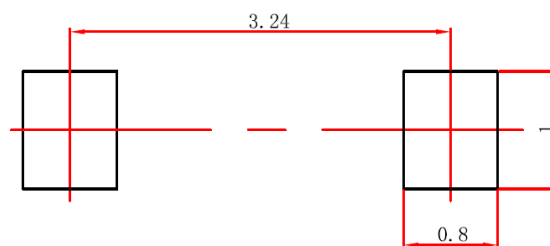
Case: SOD-123

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
$\alpha$	0	8°

### Recommended Pad outline (Unit:mm)





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