



SSCS0540D1

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

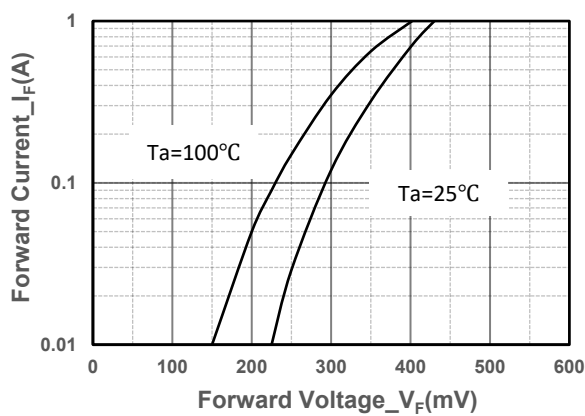
Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _R	40	V
RMS reverse voltage reverse voltage (DC)	V _{RMS}	28	V
Average Rectified Output Current	I _O	0.5	A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	5.5	A
Power Dissipation	P _D	500	mW
Typical Thermal Resistance	R _{θJA}	200	°C/W
Storage Temperature	T _{STG}	-50 ~ +150	°C
Voltage rate of change	dv/dt	1000	V/μs



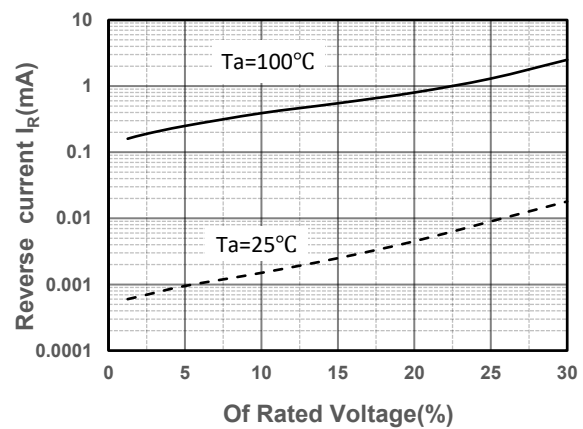
● Electrical Characteristics @T_A=25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V _R	I _R = 20μA	40			V
Forward Voltage	V _F	I _F = 0.5A			0.51	V
		I _F = 1.0A			0.62	
Reverse Current	I _R	V _R = 20V			10	μA
		V _R = 40V			20	
Junction Capacitance	C _T	V _R = 0V, f = 1MHz			170	pF

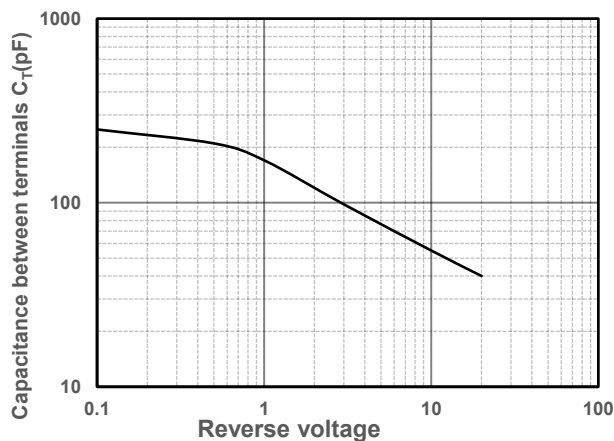
● Typical Performance Characteristics



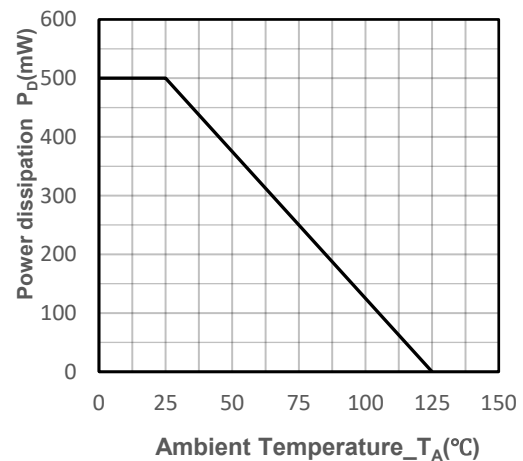
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power derating curve



● Package Information

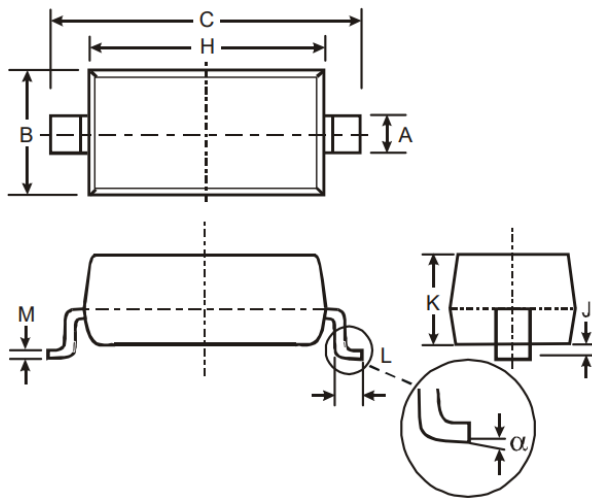
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCS0540D1	SOD-123	SF	3000	7 Inch

Mechanical Data

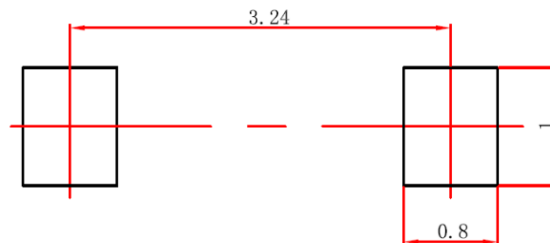
Case: SOD-123

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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