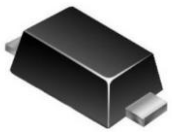
SSC1N4448D3

Fast Switching Diode

● Features

- ✧ Fast Switching Speed
- ✧ Ultra-Small Surface Mount Package
- ✧ Low Reverse Leakage Current
- ✧ Ideal for Battery Powered Portable Applications
- ✧ RoHS Compliant/Green EMC
- ✧ Moisture Sensitivity: Level 3 per J-STD-020

● PIN configuration

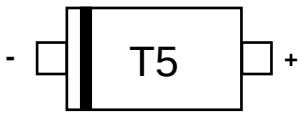


SOD-523

Circuit Diagram

● Applications

- ✧ High speed switching for detection
- ✧ Battery Powered Portable
- ✧ Mobile phones, laptops and other electronic devices



Marking (Top View)

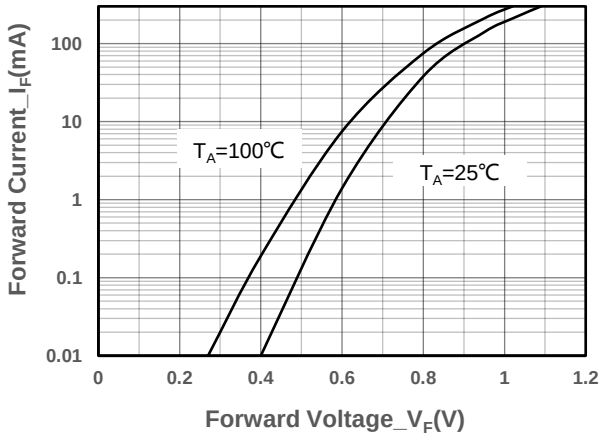
● Absolute maximum rating (T_A=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	100	
Working Peak Reverse Voltage	V_{RWM}	100	V
Reverse Voltage (DC)	V_R	75	
RMS Reverse Voltage	V_{RMS}	53	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Forward Current	I_O	250	mA
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I_{FSM}	2.5	A
Power Dissipation	P_D	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	833	℃/W
Operating Temperature	T_J	-55 ~ +150	℃
Storage Temperature	T_{STG}	-55 ~ +150	℃

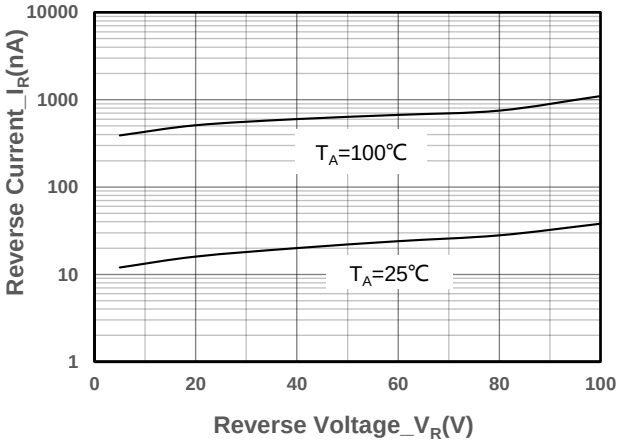
Electrical Characteristics (T_A=25℃ unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V_{R1}	I_R = 5μA	75			V
	V_{R2}	I_R = 100μA	100			
Forward Voltage	V_F	I_F = 5mA			0.7	V
		I_F = 100mA			1.0	
		I_F = 50mA			1.2	
Reverse Current	I_R	V_R = 20V			25	nA
		V_R = 75V			1	μA
Total Capacitance	C_T	V_R = 0, f = 1MHz			3	pF
Reverse Recovery Time	t_{rr}	I_F = I_R = 10mA, I_{rr} = 0.1 x I_R, R_L = 100Ω			4	ns

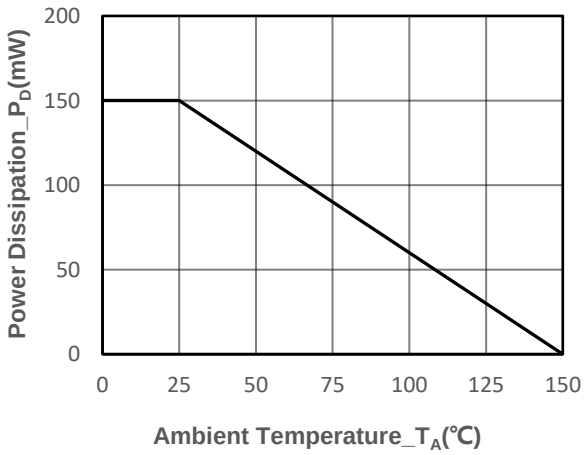
Typical Performance Characteristics (T_A=25℃ unless otherwise noted)



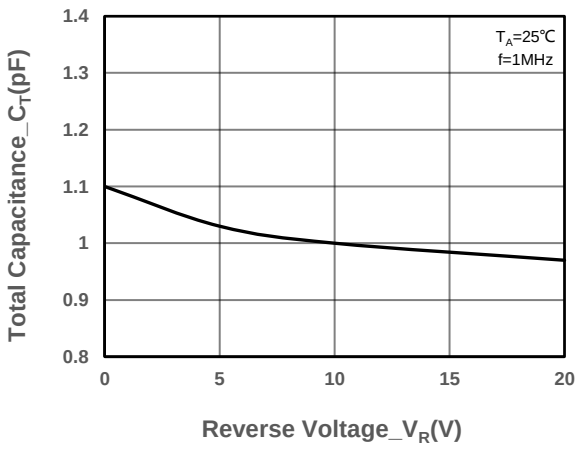
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Total Capacitance vs. Reverse Voltage

● Package Information

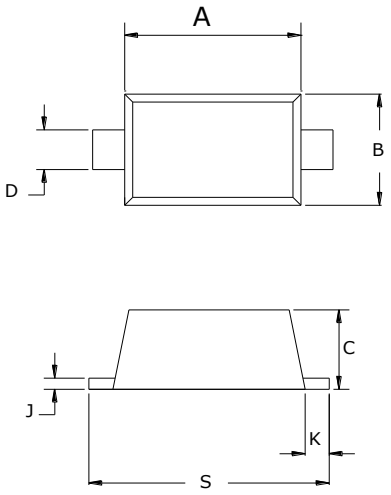
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSC1N4448D3	SOD-523	T5	3000	7 Inch

Mechanical Data

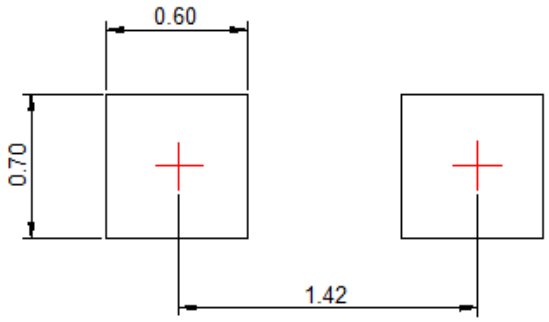
Case: SOD-523

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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