



SSCSB16D2

Schottky Barrier Diode

● Features

- ◇ Small Surface Mounting Type
- ◇ Ideal for Automated Placement
- ◇ Ultrafast Reverse Recovery Time
- ◇ Low Power Loss, High Efficiency
- ◇ Low Forward Voltage Drop
- ◇ High Current Capability
- ◇ RoHS Compliant
- ◇ Moisture Sensitivity: Level 3 per J-STD-020

● Applications

- ◇ Low Voltage
- ◇ High-Frequency Inverters
- ◇ Free Wheeling
- ◇ Switching circuit

● PIN configuration



SOD-323



Circuit Diagram



Marking(Top View)

● Absolute maximum rating @T_A=25°C

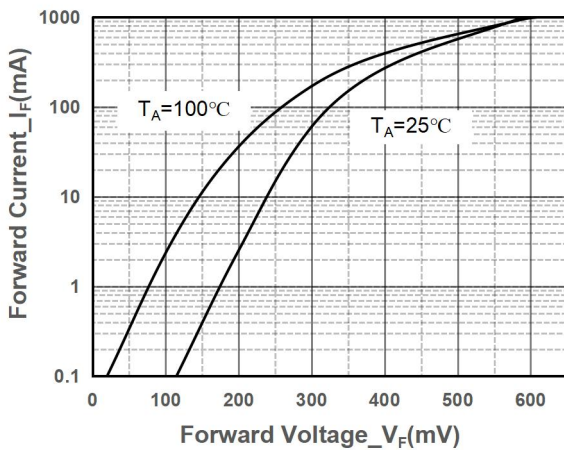
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	60	V
RMS Voltage	V _{RMS}	42	V
DC Blocking Voltage	V _{DC}	60	V
Average Rectified Output Current	I _O	1	A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	10	A
Power Dissipation	P _D	250	mW
Typical thermal resistance	R _{θJA}	400	°C/W
Operating Temperature	T _J	-40 ~ +125	°C
Storage Temperature	T _{STG}	-55~ +150	°C



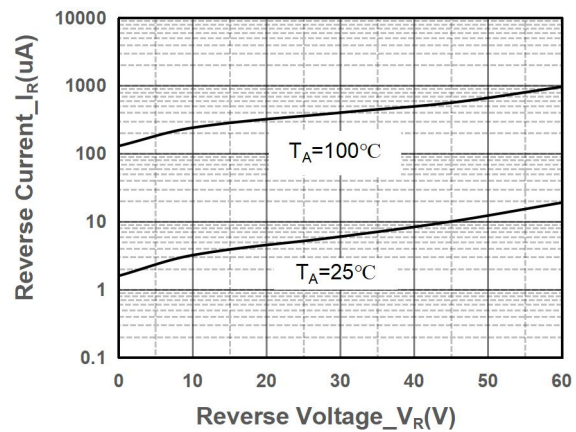
● Electrical Characteristics @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown voltage	$V_{(BR)R}$	$I_R = 0.1\text{mA}$	60			V
Reverse Leakage Current	I_R	$V_R = 60\text{V}$			100	μA
Forward Voltage	V_F	$I_F = 1\text{A}$			0.7	V
Total Capacitance	C_T	$V_R = 4\text{V}, f = 1\text{MHz}$			120	pF

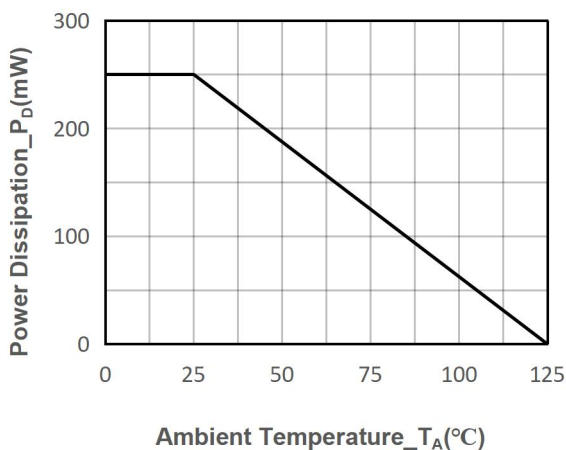
● Typical Performance Characteristics



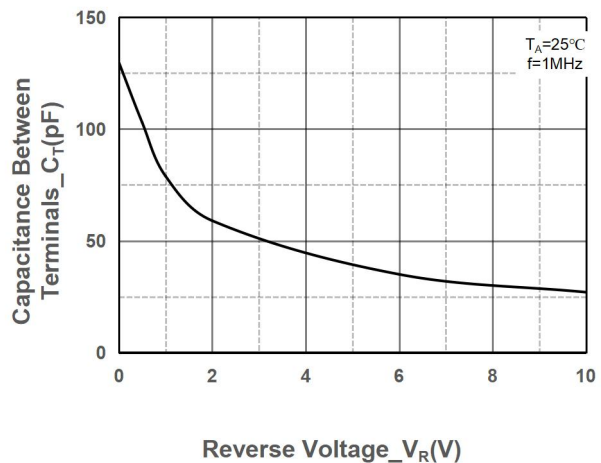
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Capacitance Characteristics vs. Reverse



● Package Information

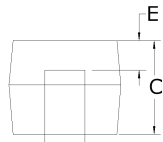
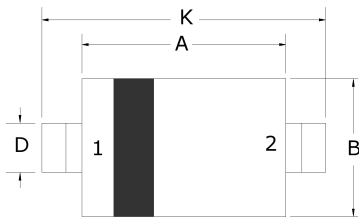
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSB16D2	SOD-323	SM	3000	7 Inch

Mechanical Data

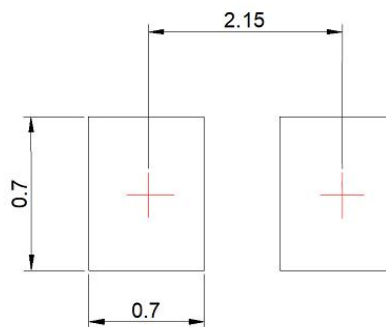
Case: SOD-323

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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