



SSCS0530D2

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-323

● 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

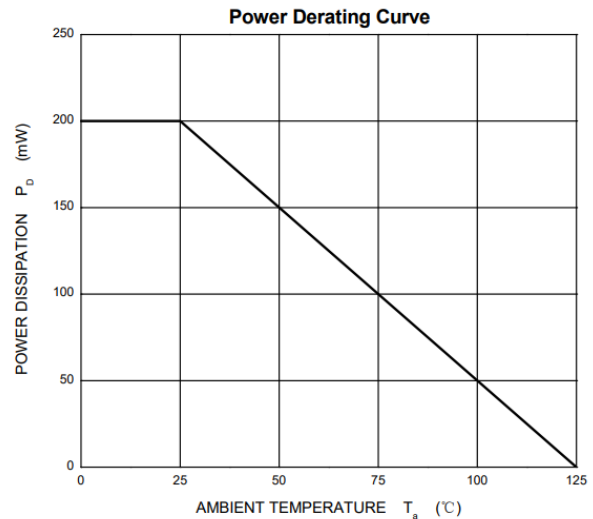
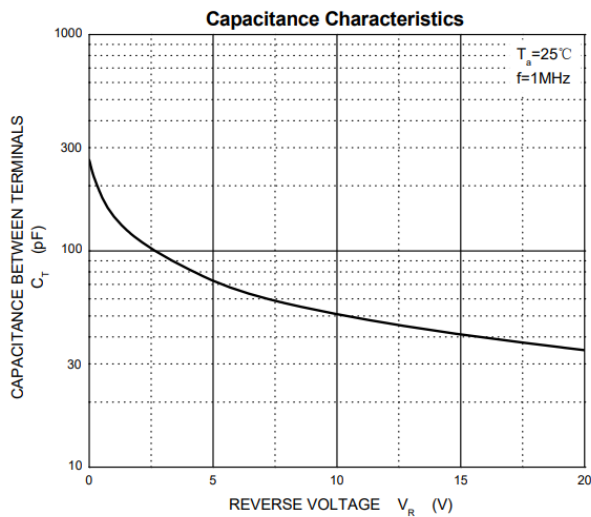
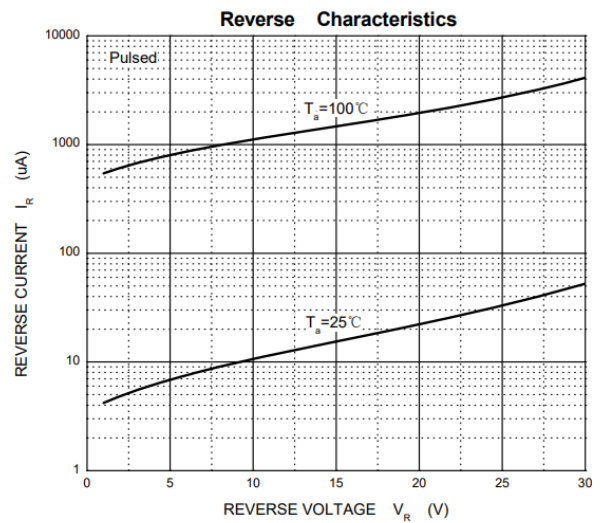
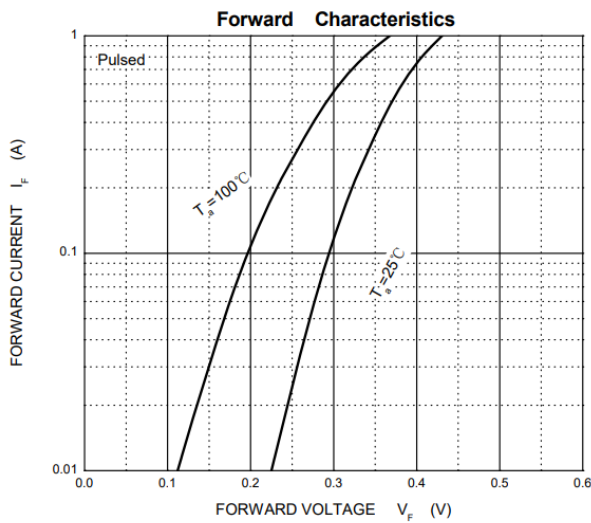
Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V _{RRM}	30	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS reverse voltage reverse voltage (DC)	V _{R(RMS)}	21	V
Average Rectified Output Current	I _o	500	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	5.5	A
Power Dissipation	P _D	200	mW
Typical Thermal Resistance	R _{θJA}	500	°C/W
Operating Temperature	T _J	-40 ~ +125	°C
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 = 200μA	30			V
Forward Voltage	V _F	I _F = 0.1A			0.375	V
		I _F = 0.5A			0.450	
Reverse Current	I _R	V _R = 15V			80	μA
		V _R = 30V			500	
Junction Capacitance	C _J	V _R = 1V, f = 1MHz		170		pF

● Typical Performance Characteristics





● Package Information

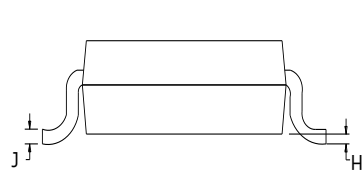
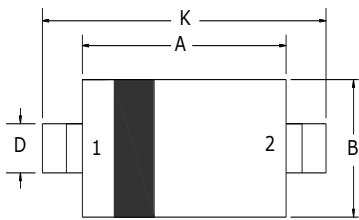
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCS0530D2	SOD-323	SE	3000	7 Inch

Mechanical Data

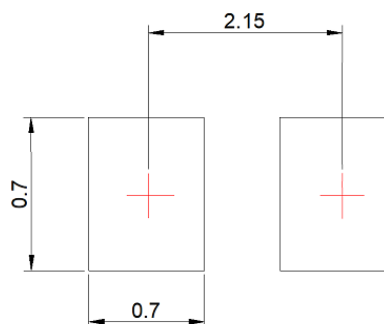
Case: SOD-323

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)





DISCLAIMER

AFSEMI RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. AFSEMI DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICIENCE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

THE GRAPHS PROVIDED IN THIS DOCUMENT ARE STATISTICAL SUMMARIES BASED ON A LIMITED NUMBER OF SAMPLES AND ARE PROVIDED FOR INFORMATIONAL PURPOSE ONLY. THE PERFORMANCE CHARACTERISTICS LISTED IN THEM ARE NOT TESTED OR GUARANTEED. IN SOME GRAPHS, THE DATA PRESENTED MAY BE OUTSIDE THE SPECIFIED OPERATING RANGE (E.G. OUTSIDE SPECIFIED POWER SUPPLY RANGE) AND THEREFORE OUTSIDE THE WARRANTED RANGE.