

WSB5503W

Middle Power Schottky Barrier Diode

[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)

Features

- 1A Average rectified forward current
- Low forward voltage
- Low leakage current
- Small package SOD-323



SOD-323



Circuit

Applications

- Switching circuit
- Middle current rectification



Marking

Absolute maximum ratings

Parameter	Symbol	Value	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_O	1	A
Peak forward current ⁽¹⁾	I_{PK}	25	A
Junction temperature	T_J	125	°C
Operating temperature	T_{opr}	-40 ~ 85	°C
Storage temperature	T_{stg}	-55 ~ 150	°C

Electronics characteristics ($T_A=25^\circ C$)

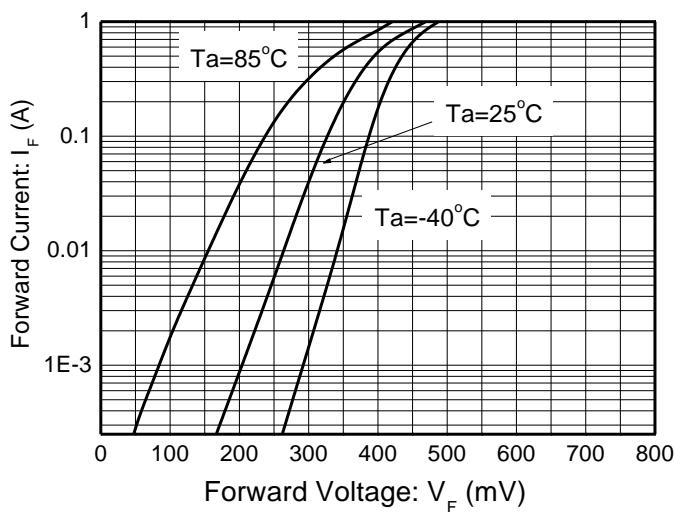
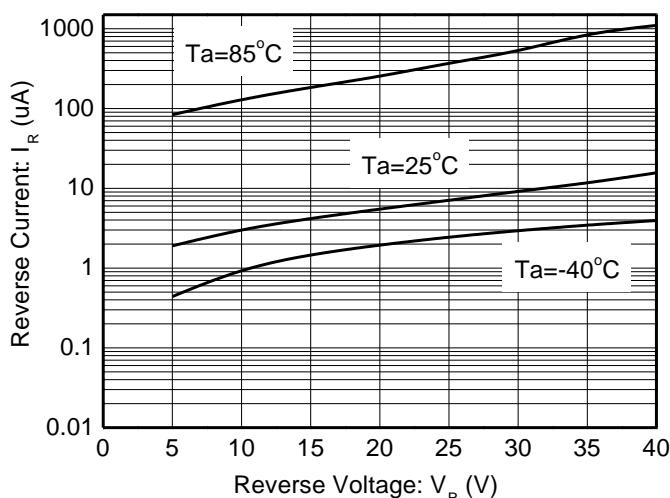
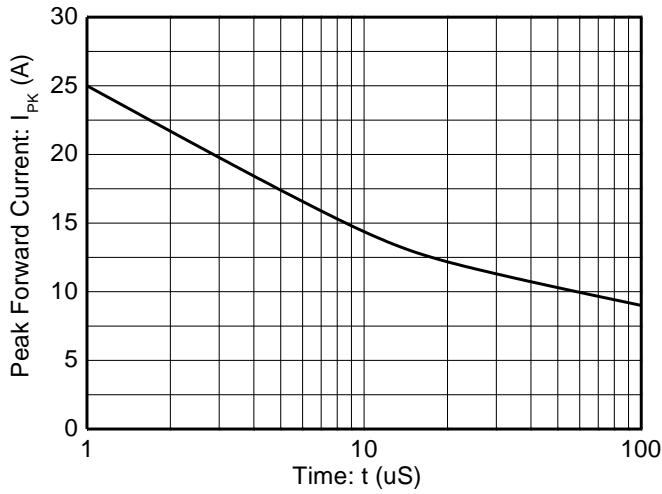
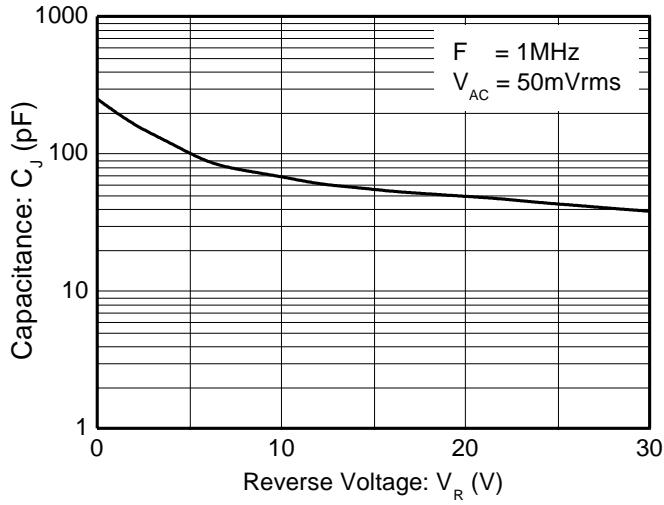
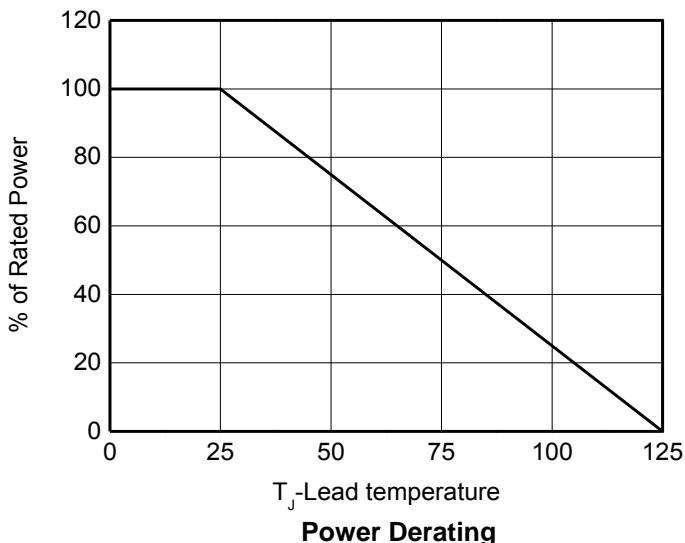
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=1A$	-	0.5	0.57	V
Reverse current	I_R	$V_R=V_R$	-	10	50	uA
Junction capacitance	C_J	$V_R=4V, F=1MHz$	-	-	120	pF

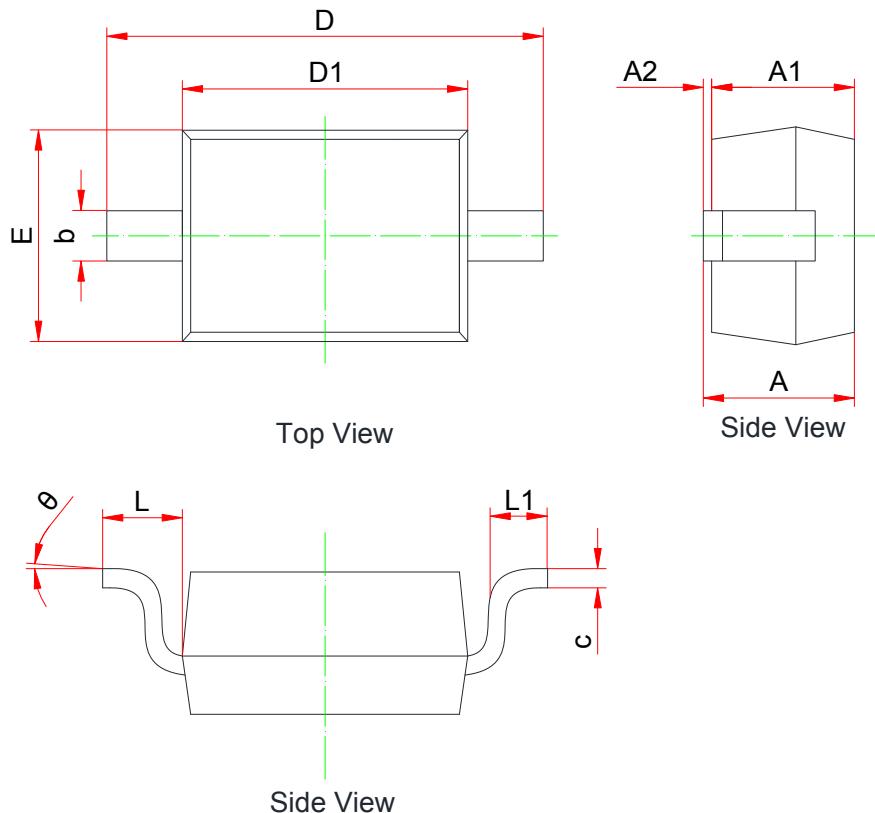
Order Informations

Device	Package	Marking	Shipping
WSB5503W-2/TR	SOD-323	*. L ⁽²⁾	3000/Reel&Tape

Note 1 : Pulse Width=1us, Single Pulse

Note 2 : * = Month code (A~Z); . L = Device code

Typical characteristics (Ta=25°C, unless otherwise noted)

Forward voltage vs. Forward current

Reverse current vs. Reverse voltage

Peak pulse forward current characteristics

Junction capacitance vs. Reverse voltage

Power Derating

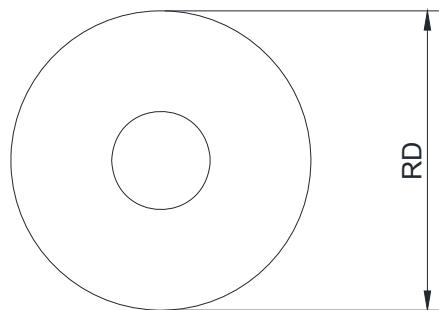
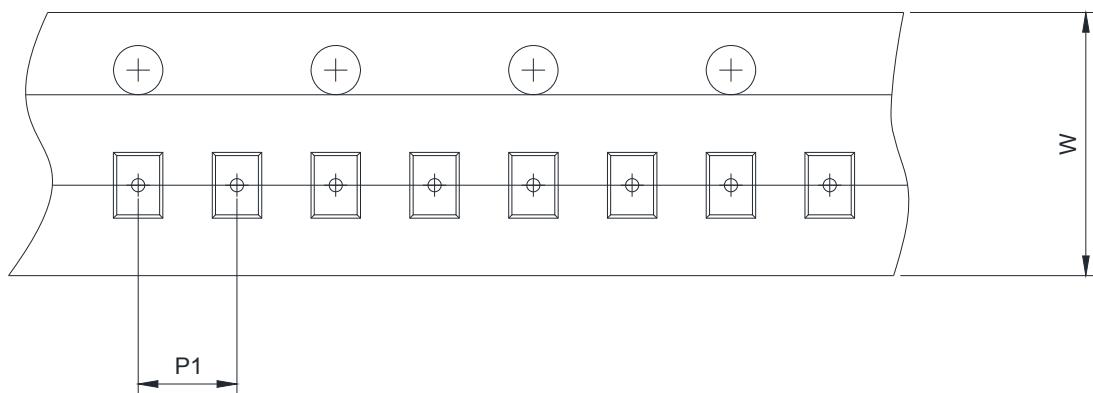
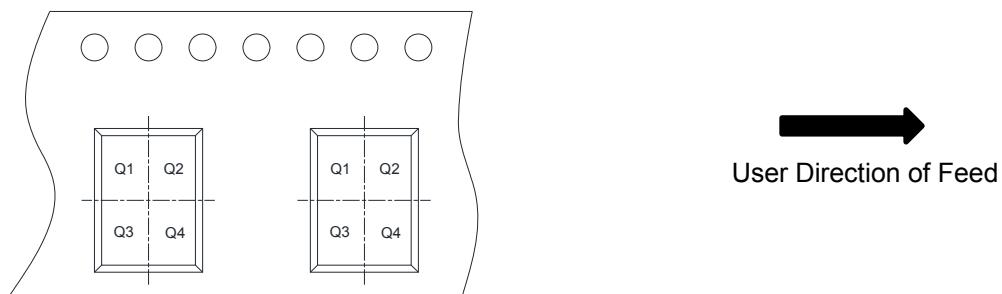
PACKAGE OUTLINE DIMENSIONS
SOD-323


Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	-	-	1.10
A1	0.85Ref		
A2	0.00	-	0.10
b	0.25	-	0.40
c	0.08	-	0.18
D1	1.60	1.70	1.80
D	2.30	2.55	2.80
E	1.15	-	1.40
L	0.48Ref.		
L1	0.10	-	0.50
θ	0°	-	8°

Recommended land pattern (Unit: mm)

Notes:

This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.

TAPE AND REEL INFORMATION
Reel Dimensions

Tape Dimensions

Quadrant Assignments For PIN1 Orientation In Tape


RD	Reel Dimension	<input checked="" type="checkbox"/> 7inch <input type="checkbox"/> 13inch
W	Overall width of the carrier tape	<input checked="" type="checkbox"/> 8mm <input type="checkbox"/> 12mm <input type="checkbox"/> 16mm
P1	Pitch between successive cavity centers	<input type="checkbox"/> 2mm <input checked="" type="checkbox"/> 4mm <input type="checkbox"/> 8mm
Pin1	Pin1 Quadrant	<input checked="" type="checkbox"/> Q1 <input checked="" type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4