WSB5503W

Middle Power Schottky Barrier Diode **Http://www.sh-willsemi.com**

Features

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



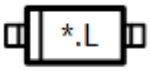
SOD-323



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	Topr	-40 ~ 85	°C
Storage temperature	Tstg	-55 ~ 150	°C

Electronics characteristics (T_A=25°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

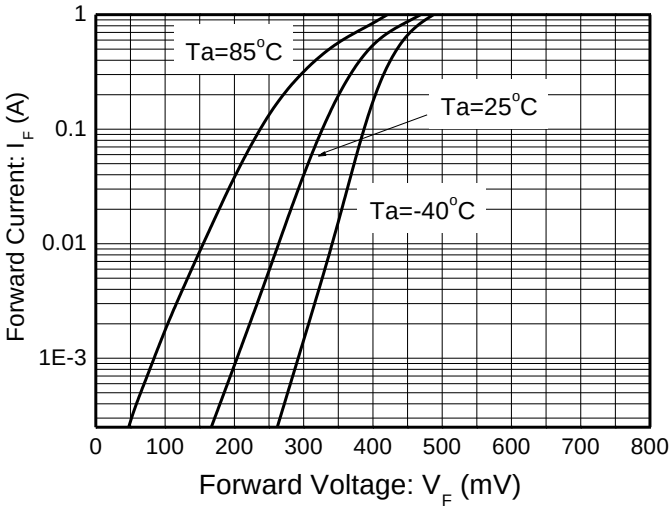
Order Informations

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

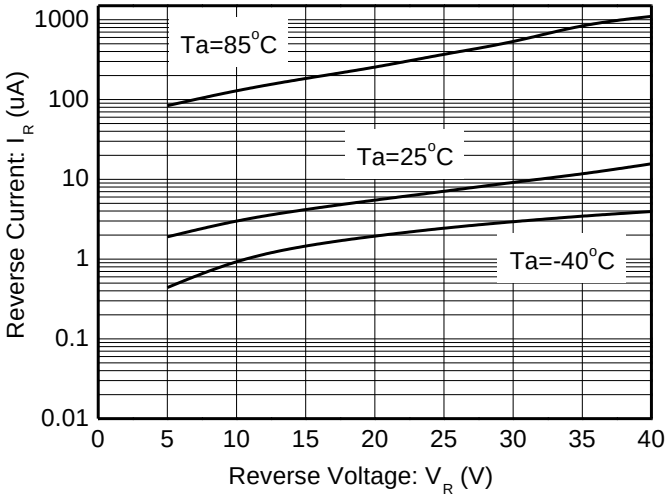
Note 1 : Pulse Width=1us, Single Pulse

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

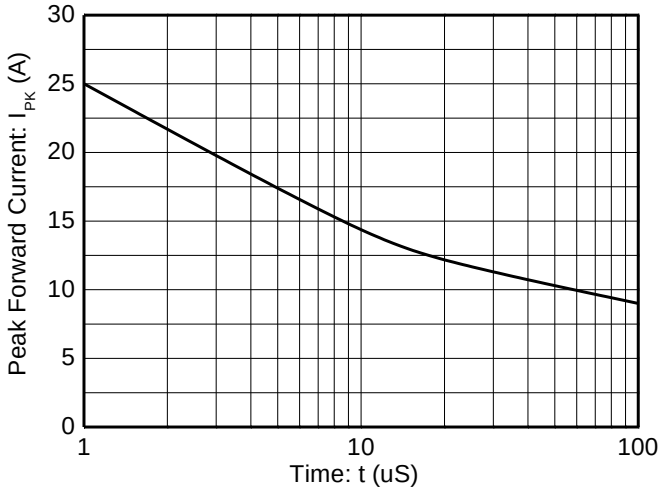
Typical characteristics (Ta=25°C, unless otherwise noted)



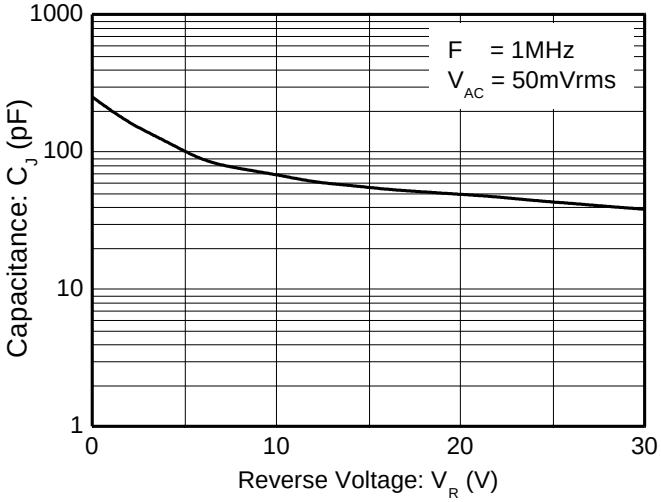
Forward voltage vs. Forward current



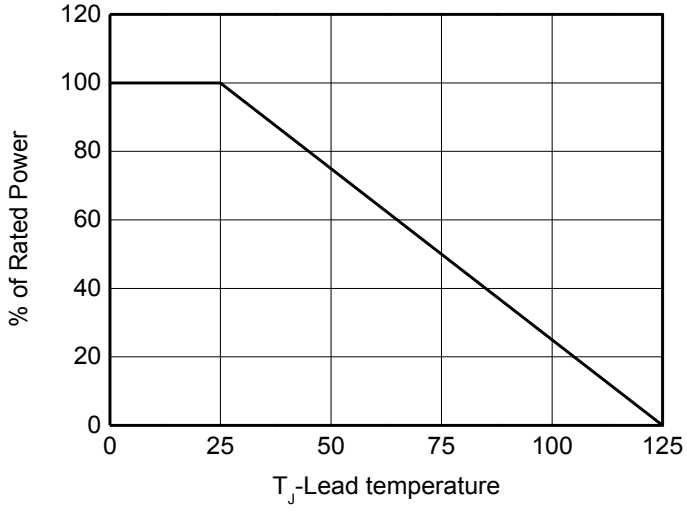
Reverse current vs. Reverse voltage



Peak pulse forward current characteristics



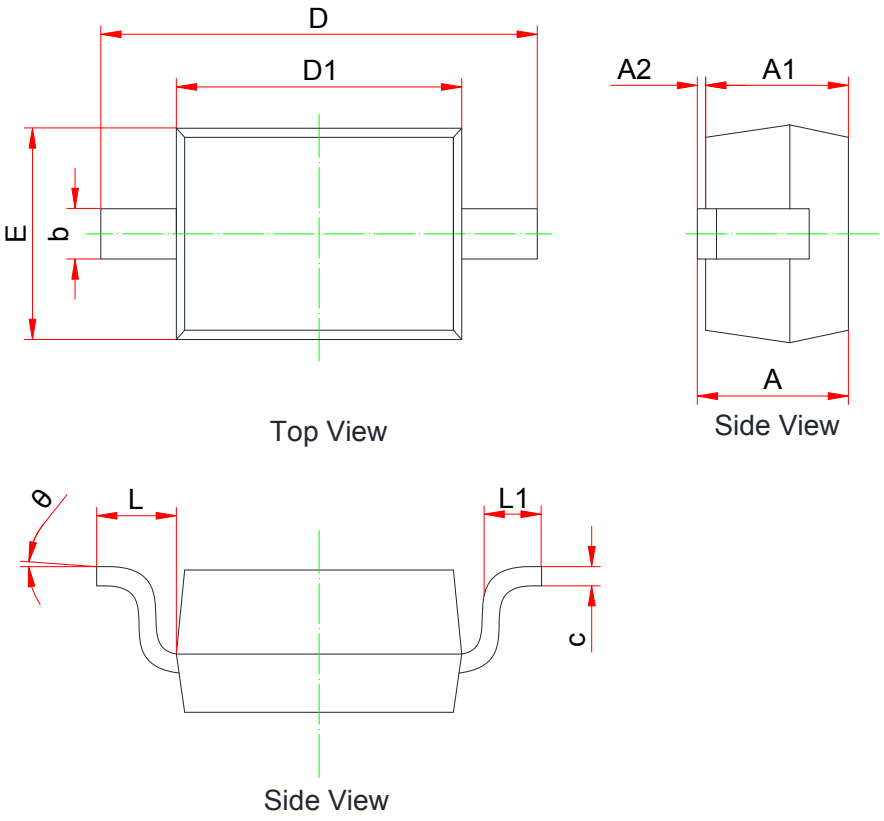
Junction capacitance vs. Reverse voltage



Power Derating

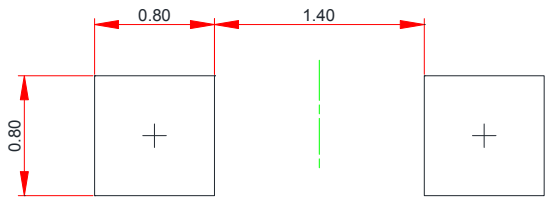
PACKAGE OUTLINE DIMENSIONS

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)

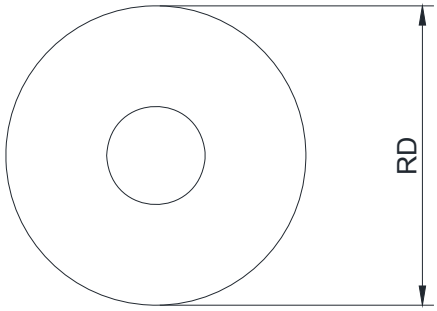


Notes:

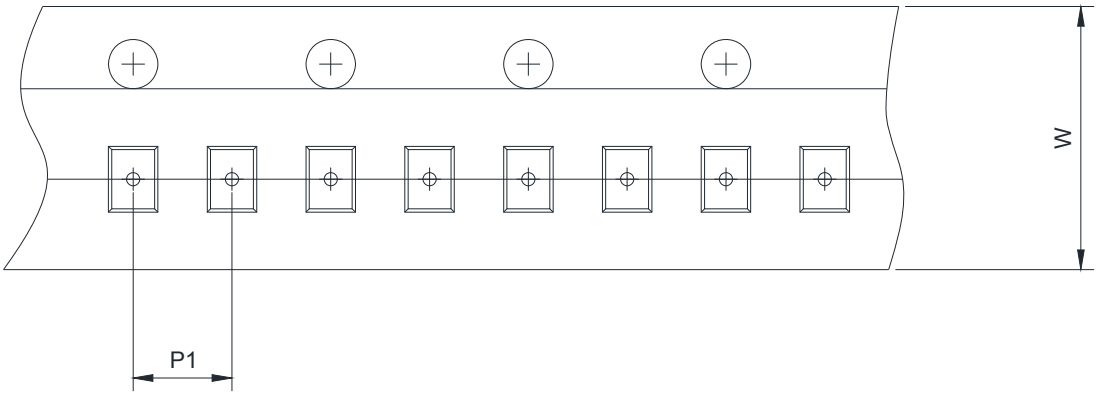
This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.

TAPE AND REEL INFORMATION

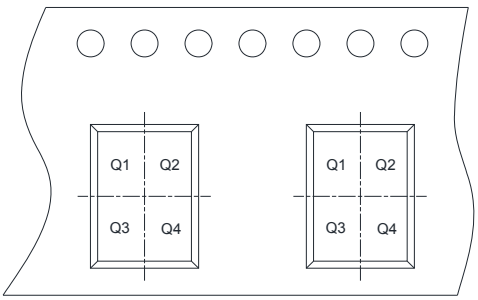
Reel Dimensions



Tape Dimensions



Quadrant Assignments For PIN1 Orientation In Tape



User Direction of Feed

RD	Reel Dimension	☑ 7inch	☐ 13inch		
W	Overall width of the carrier tape	☑ 8mm	☐ 12mm	☐ 16mm	
P1	Pitch between successive cavity centers	☐ 2mm	☑ 4mm	☐ 8mm	
Pin1	Pin1 Quadrant	☑ Q1	☑ Q2	☐ Q3	☐ Q4