WSB5518W

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

Features



SOD-323

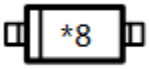
- 0.5 A Average rectified forward current
- Low forward voltage, low leakage current
- Small package SOD-323

Applications



Circuit

- Switching circuit
- Middle current rectification



Marking

Absolute maximum ratings

Parameter	Symbol	Value	Unit
Reverse voltage (repetitive peak)	V_{RRM}	60	V
Reverse voltage (DC)	V_R	60	V
Average rectified forward current	I_O	0.5	A
Peak forward surge current (1)	I_{FSM}	7	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 (2)	V_F	I_F=0.5A	-	0.5	0.55	V
Reverse current	I_R	V_R=60V	-	4	100	uA
Junction capacitance	C_J	V_R=4V, F=1MHz	-	34		pF
Thermal resistance (3)	$R_{\theta JL}$	Junction to Lead		108	135	K/W

Order Informations

Device	Package	Marking	Shipping
WSB5518W-2/TR	SOD-323	∗8 (4)	3000/Reel&Tape

Note 1 : Pulse Width=8.3ms, Single Pulse;

Note 2 : Single Pulse test tp=380us;

Note 3 : Device mounted on an FR4 PCB，single-sided copper, tin-plated and standard footprint.

Note 4 : ∗ = Month code (A~Z); 8 = Device code;

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

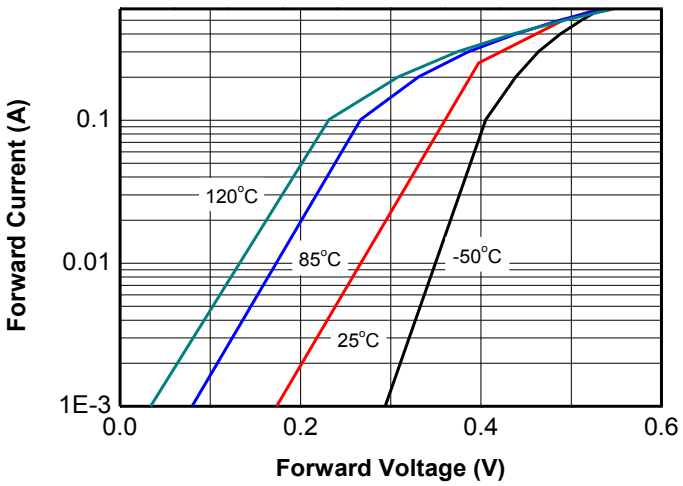


Fig.1 Forward voltage vs. Forward current

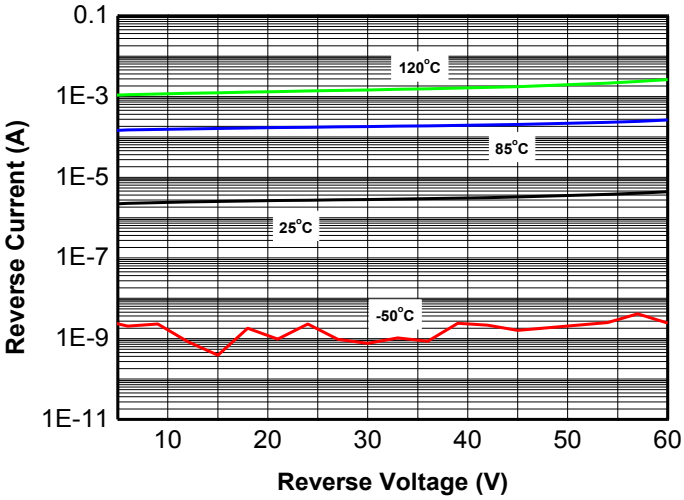


Fig.2 Reverse current vs. Reverse voltage

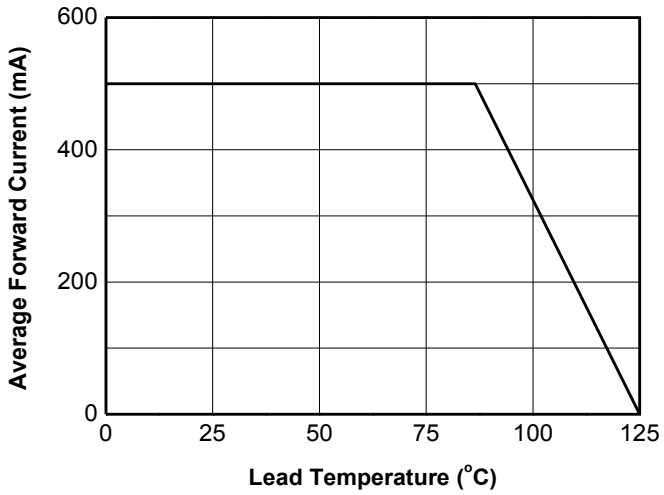


Fig.3 Forward Current Derating

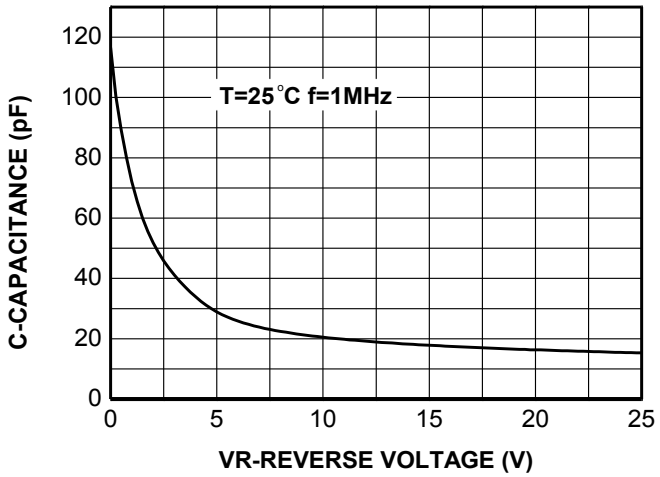
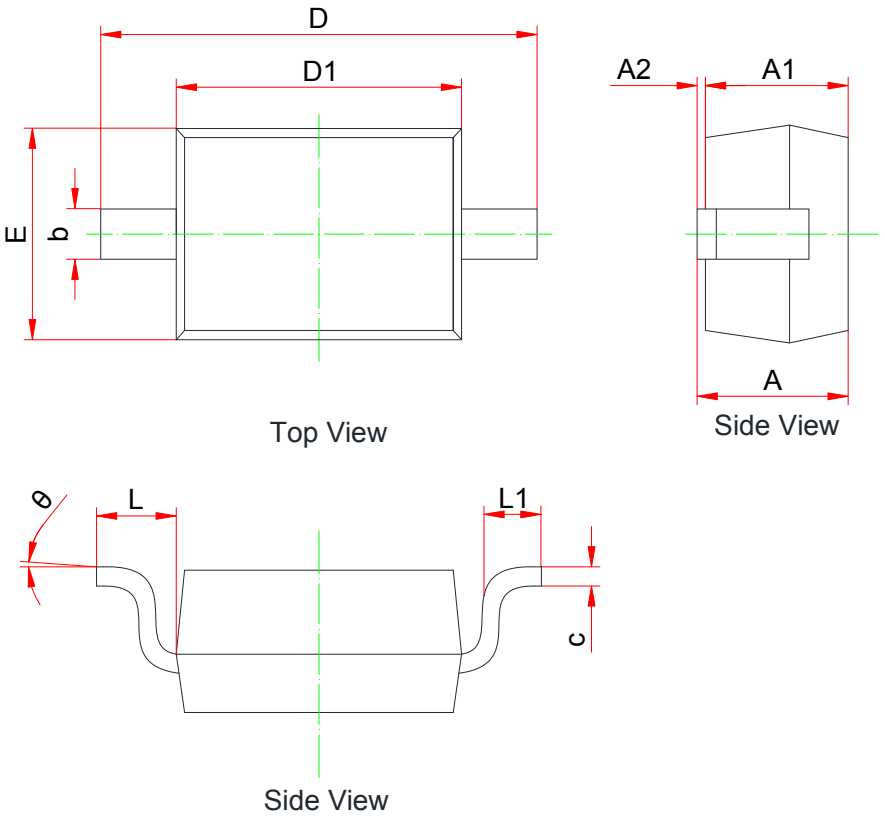


Fig.4 Junction capacitance vs. Reverse voltage

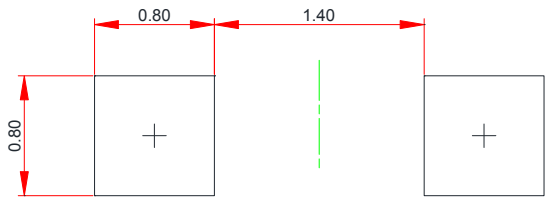
Package outline dimensions

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)

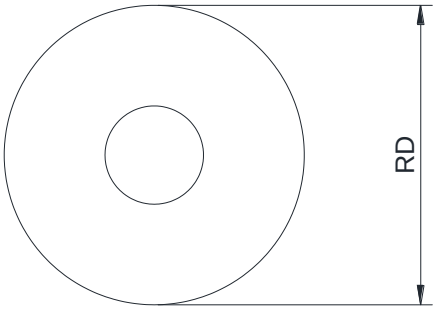


Notes:

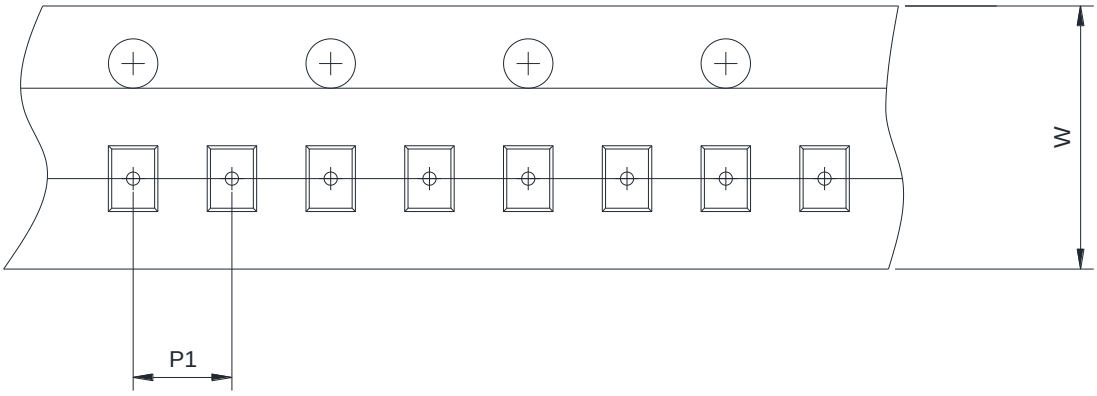
This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.

TAPE AND REEL INFORMATION

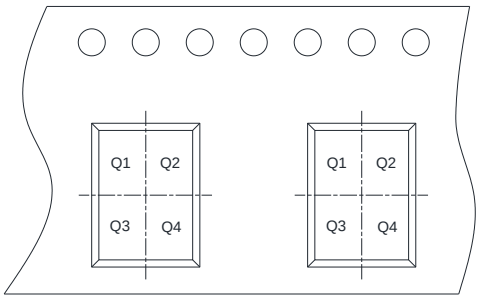
Reel Dimensions



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