WSB5543W

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

Features

- 1.0A Average rectified forward current
- Trench MOS Schottky technology
- Low forward voltage,low leakage current
- Small package SOD-323F



SOD-323F



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(1)	I_O	1.0	A
Forward peak surge current(2)	I_{FSM}	7	A
Junction temperature	T_J	-55 ~ 150	°C
Operating temperature	Topr	-55 ~ 150	°C
Storage temperature	Tstg	-55 ~ 150	°C

Electronics characteristics (T_A=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage(3)	V_F	I_F=1.0A	-	0.48	0.57	V
Reverse current	I_R	V_R=V_R	-	8	50	uA
Junction capacitance	C_J	V_R=1V, F=1MHz	-	80	-	pF
Thermal resistance(4)	$R_{\theta JSP}$	Junction to Soldering point	-	-	60	K/W

Order Informations

Device	Package	Marking	Shipping
WSB5543W-2/TR	SOD-323F	DA* (5)	3000/Reel&Tape

Note 1: Duty cycle=0.5，f=20kHz，square wave;

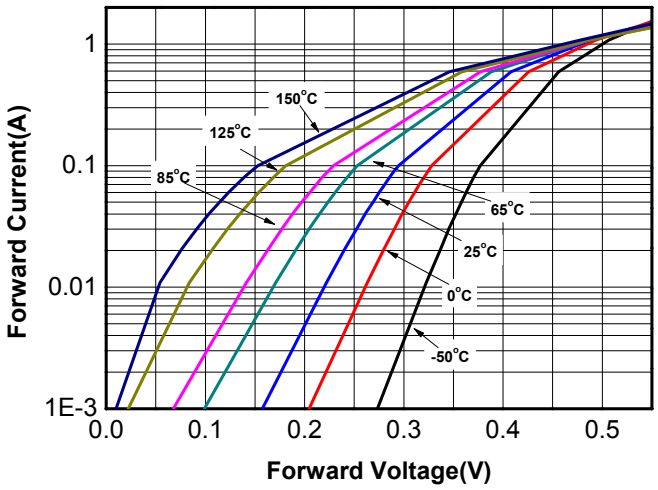
Note 2: Pulse Width=8.3ms, Single sine Pulse

Note 3: Single Pulse test tp=380us;

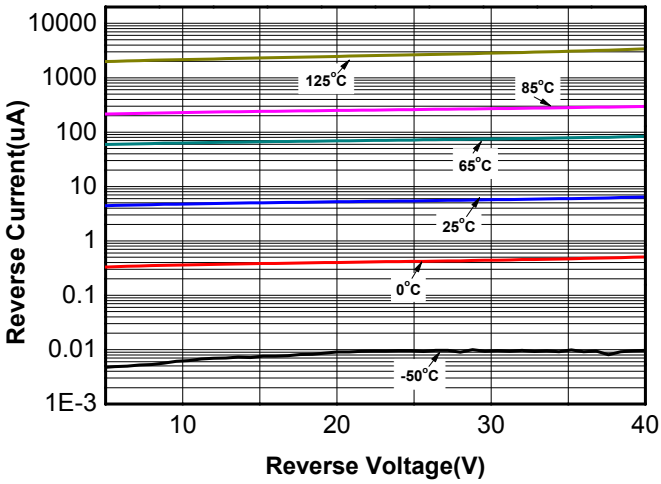
Note 4: Soldering point of cathode tab；

Note 5:∗ = Month code (A~Z); DA = Device code

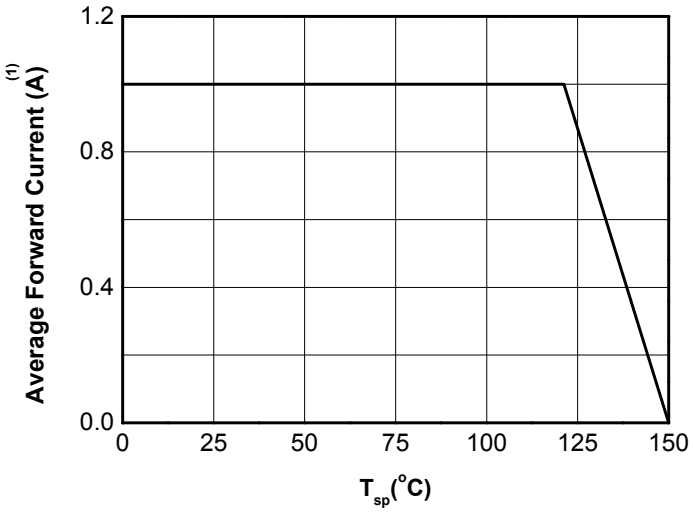
Typical characteristics (Ta=25°C, unless otherwise noted)



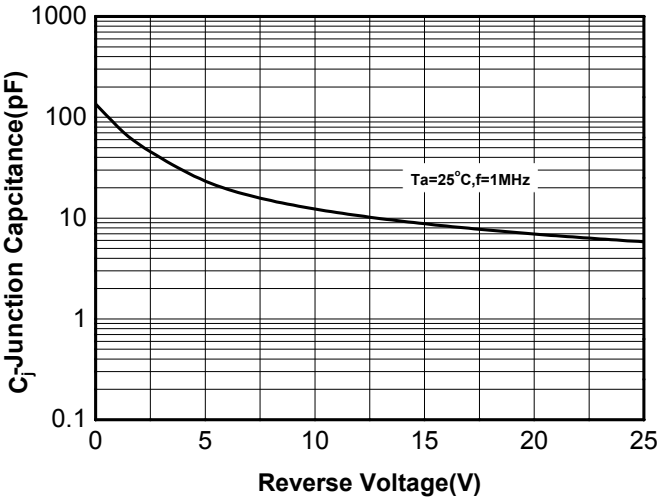
Forward voltage vs. Forward current



Reverse current vs. Reverse voltage



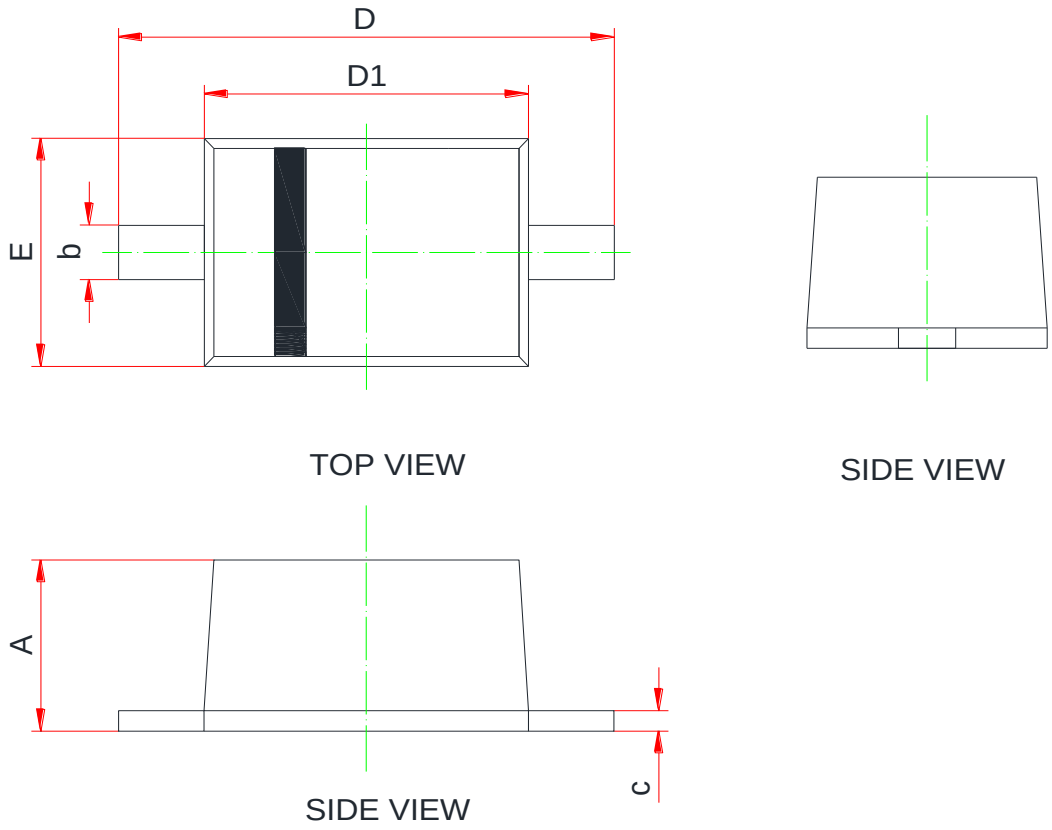
Current Derating



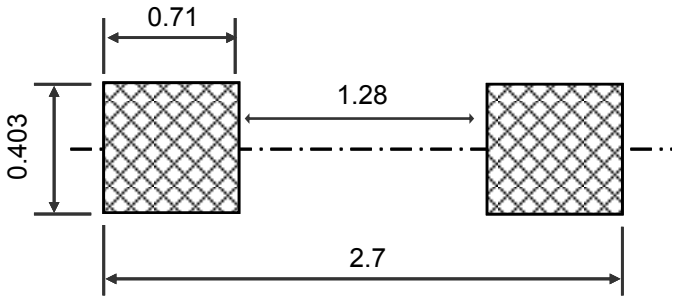
Junction capacitance vs. Reverse voltage

PACKAGE OUTLINE DIMENSIONS

SOD-323F



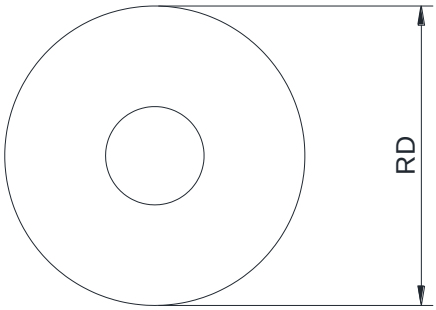
Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	0.60	-	1.10
c	0.08	0.13	0.18
b	0.25	-	0.40
D1	1.60	1.70	1.80
E	1.15	1.25	1.35
D	2.30	2.50	2.80



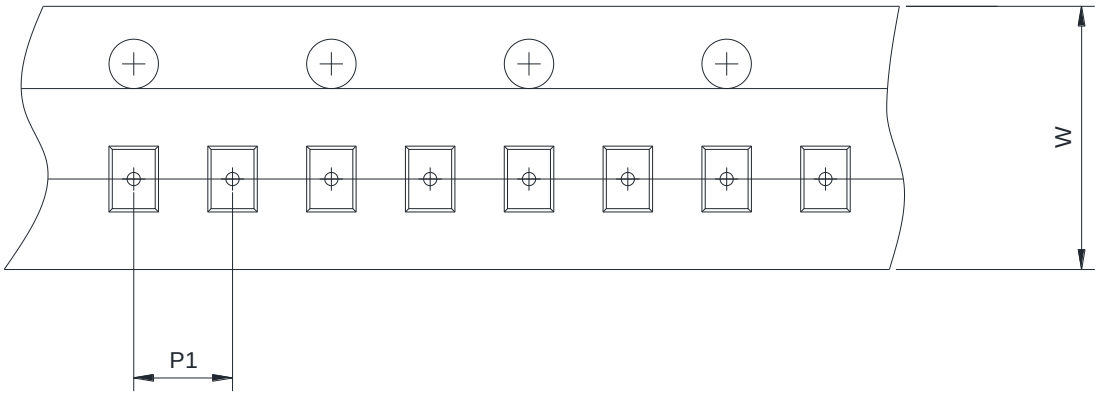
Land Pattern Recommendation

TAPE AND REEL INFORMATION

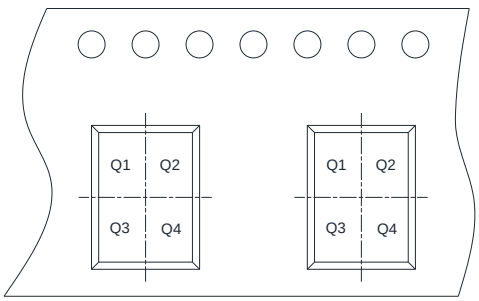
Reel Dimensions



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