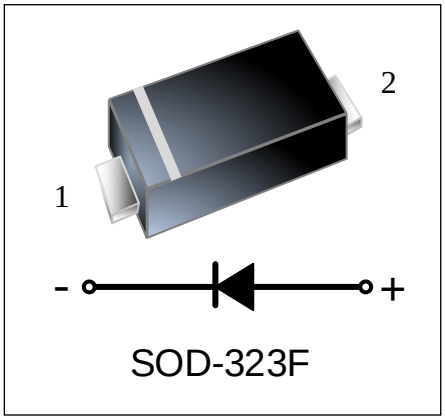
WSR4001D3A

Schottky Barrier Diode

Features

- Low Forward Voltage
- Low Reverse Current
- High Conductance
- RoHS Compliant / Green EMC
- Very Small SMD Plastic Package



Applications

- Low voltage rectification
- High efficiency DC-to-DC conversion
- Switch mode power supply
- Reverse polarity protection
- Low Power Consumption Applications

Absolute Maximum Rating(Tamb=25°C)

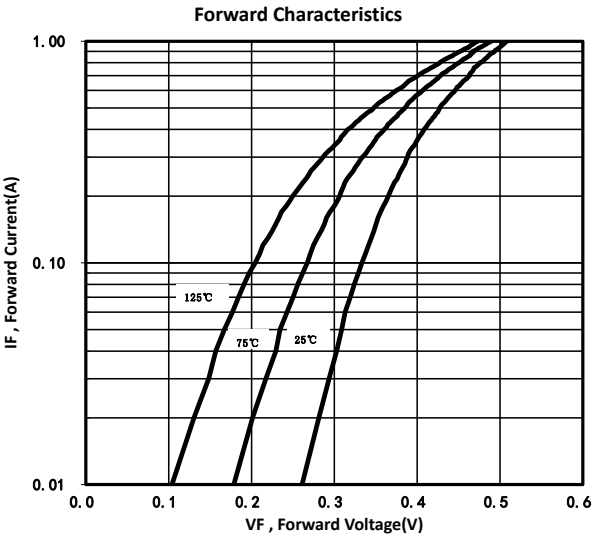
Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Average Rectified Output Current	I_O	1	A
Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	9	A
Power Dissipation	P_D	250	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	400	°C/W
Operation Junction Temperature Range	T_j	-55 ~ +125	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

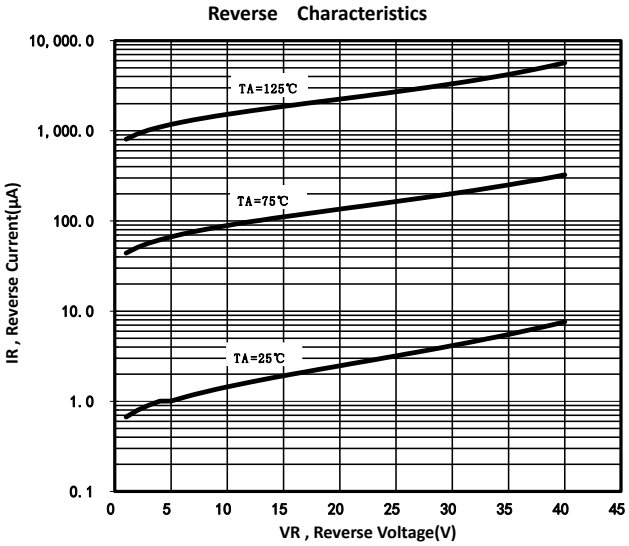
Electrical Characteristics (Tamb=25°C unless otherwise noted)

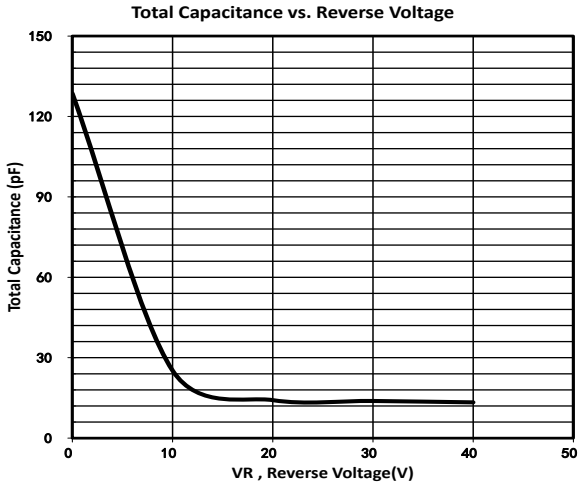
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V_{BR}	I_R = 1mA	40	-	-	V
Reverse Leakage Current	I_R	V_R = 40V	-	-	40	μA
Forward Voltage	V_F	I_F = 1A	-	-	0.6	V
	V_F	I_F = 3A	-	-	0.9	V
Diode Capacitance	C_D	V_R = 4V,f = 1MHz	-	-	120	pF

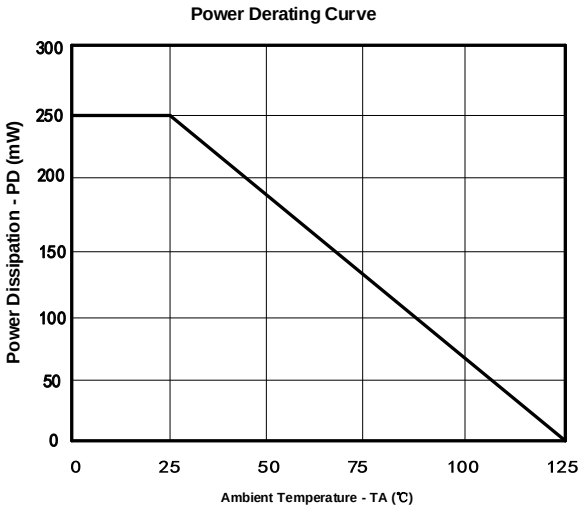
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Typical Characteristics



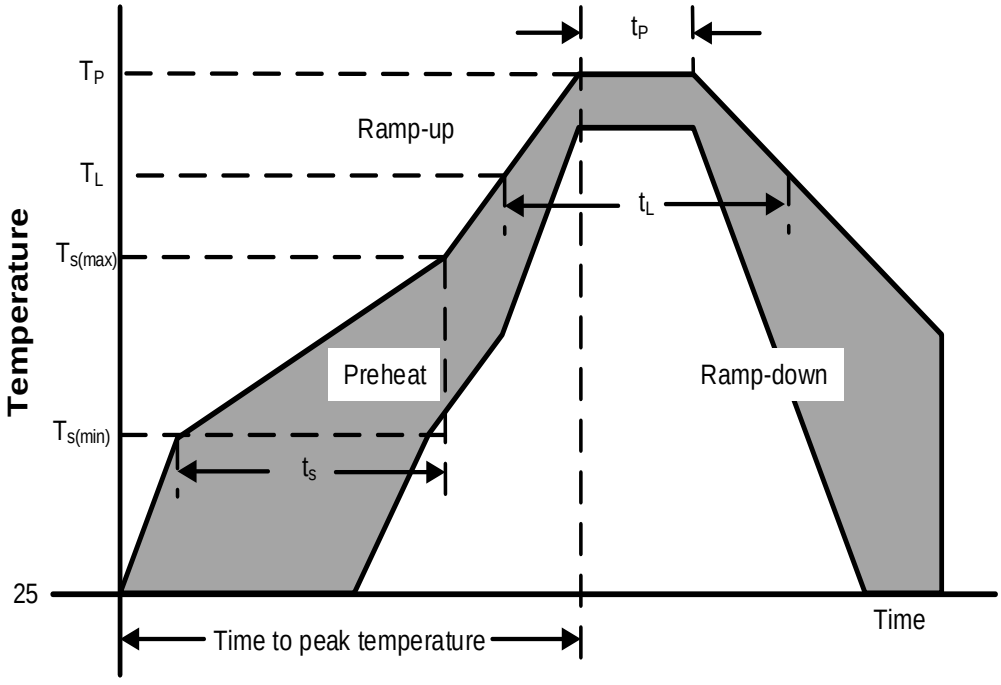






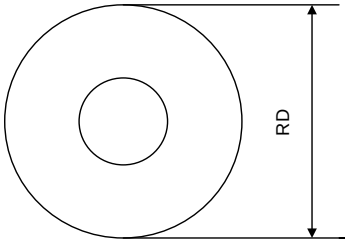
Soldering Parameters

Reflow Condition		Pb – Free assembly
Pre Heat	Temperature Min ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (ts)	60 – 190 secs
Average ramp up rate (Liquidus Temp) (T_L) to peak		5°C/second max
$T_{S(max)}$ to T_L——Ramp-up Rate		5°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_P)		260+0/-5 °C
Time within actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		5°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		280°C

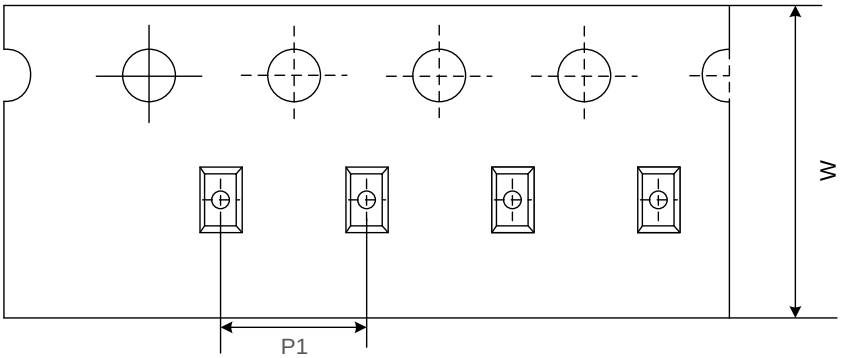


Tape And Reel Information

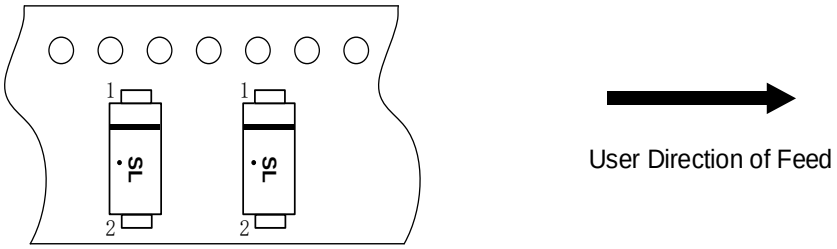
Reel Dimensions



Tape Dimensions



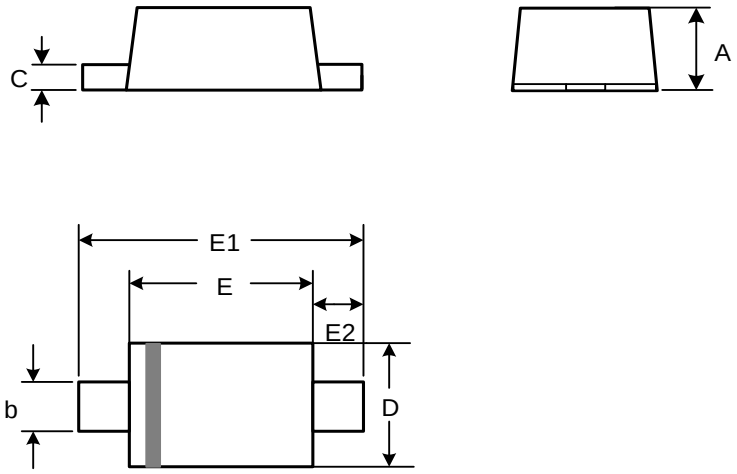
Quadrant Assignments For PIN1 Orientation In Tape

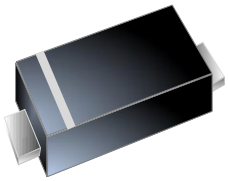


RD	Reel Dimensions	7 inch
W	Overall width of the carrier tape	8 mm
P1	Pitch between successive cavity centers	4 mm

Outline Drawing – SOD323F

PACKAGE OUTLINE

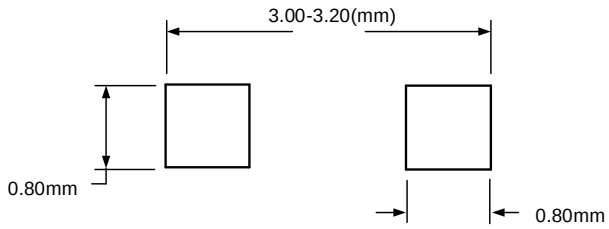




SOD-323F

SYMBOL	MILLIMETERS	
	MIN	MAX
A	0.60	0.80
b	0.25	0.40
C	0.08	0.15
D	1.15	1.35
E	1.60	1.80
E1	2.30	2.70
E2	0.30	0.50

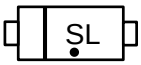
MOUNTING PAD



Notes

Controlling Dimension: Millimeter.

Marking Codes

Part Number	WSR4001D3A
Marking Code	

Package Information

Qty：3k/Reel

CONTACT INFORMATION

No.1001, Shiwan (7) Road, Pudong District, Shanghai, P.R.China.201207
Tel: 86-21-68969993 Fax: 86-21-50757680 Email: market@way-on.com
WAYON website: **http://www.way-on.com**

For additional information, please contact your local Sales Representative.

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Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.