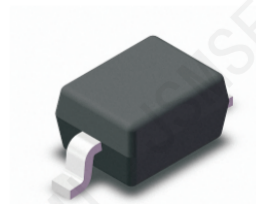


## FEATURES

- Low Forward Voltage Drop
- Very Small SMD Package

## APPLICATIONS

- Low Voltage Rectification
- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications



SOD-323

## MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted )

Symbol	Parameter	Value	Unit
$V_{RRM}$	Peak Repetitive Reverse Voltage	40	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
$I_F$	Continuous Forward Current	2	A
$I_{FSM}$	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	9	A
$P_D$	Power Dissipation	Note1	mW
		Note2	
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	Note1	$^{\circ}\text{C/W}$
		Note2	
$T_J$	Operating Junction Temperature Range	$-40 \sim +125$	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	$-55 \sim +150$	$^{\circ}\text{C}$

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

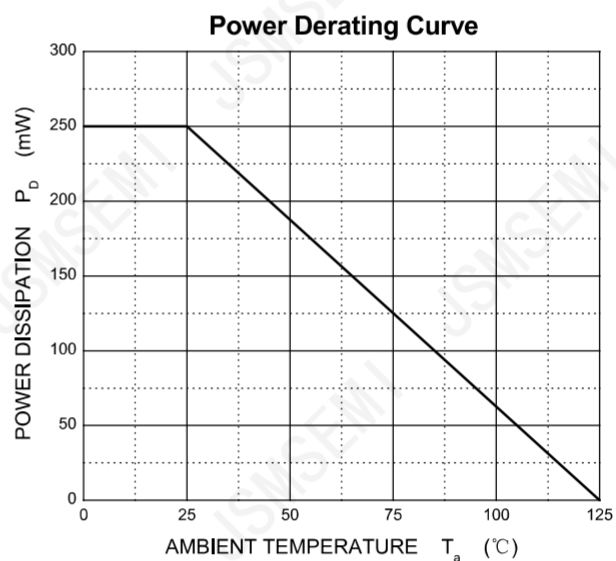
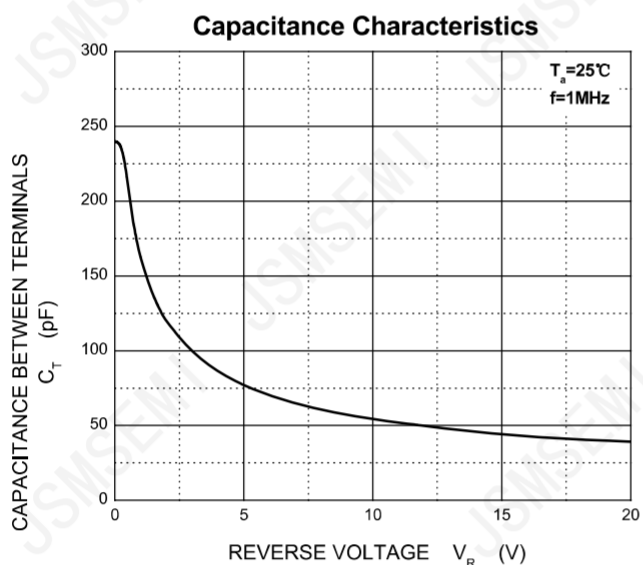
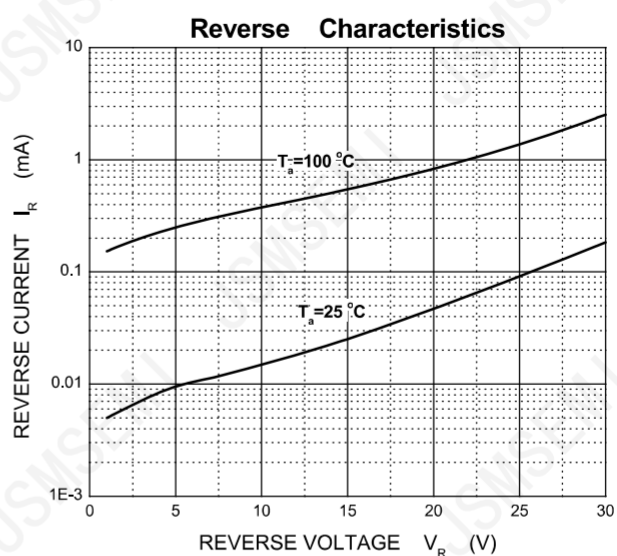
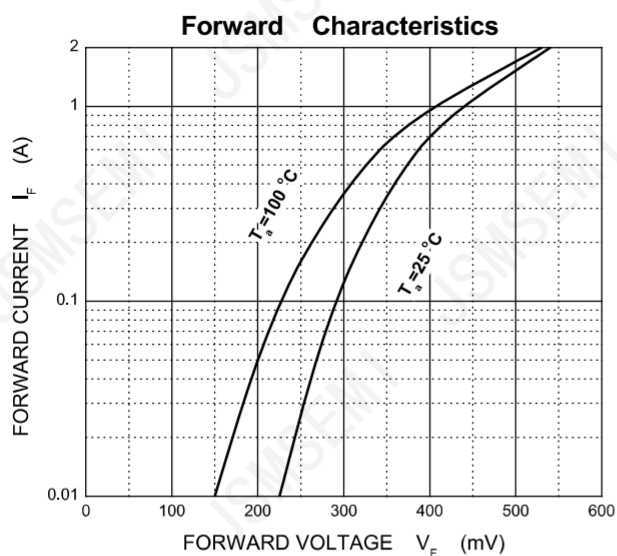
2: Device mounted on an FR4 PCB with copper pad 10 x 10 mm.

## ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

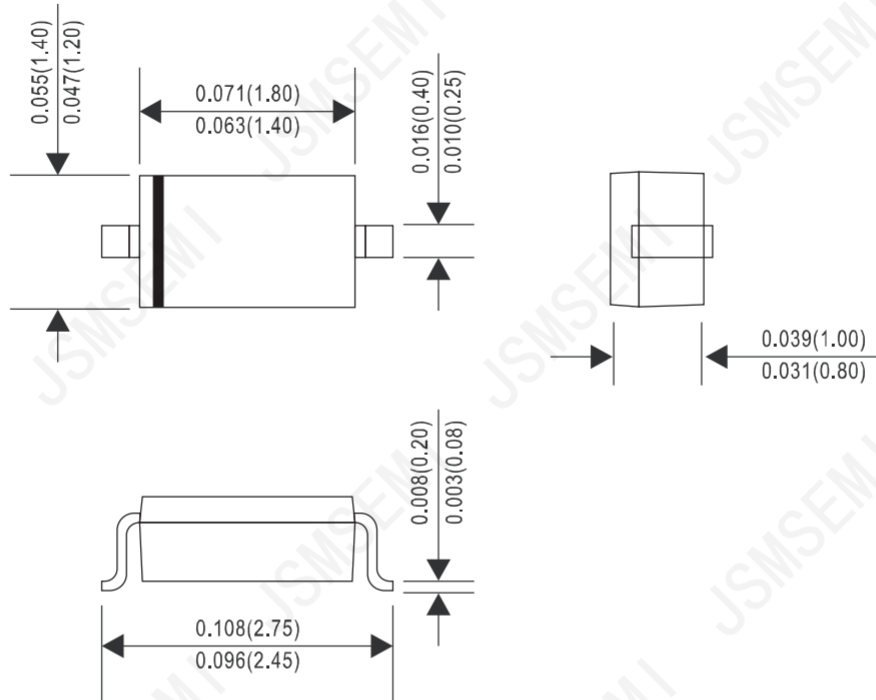
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1\text{mA}$	40			V
Reverse current	$I_R$	$V_R=30\text{V}$			50	$\mu\text{A}$
		$V_R=40\text{V}$			100	
Forward voltage	$V_F^*$	$I_F=1\text{A}$		0.41	0.45	V
		$I_F=2\text{A}$		0.50	0.55	
Total capacitance	$C_{tot}$	$V_R=4\text{V}, f=1\text{MHz}$			120	pF

\*Pulse test:  $t_p \leq 300 \mu\text{s}$ ;  $\delta \leq 0.02$ .

## Typical Characteristics



SOD-323



Dimensions in inches and (millimeters)

## Revision History

Rev.	Change	Date
V1.0	Initial version	6/27/2021

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