

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		
$V_{R(\text{RMS})}$	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	250	mW
		480	
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	400	°C/W
		208	
T_J	Operating Junction Temperature Range	-40 ~ +125	°C
T_{stg}	Storage Temperature Range	-55 ~ +150	°C

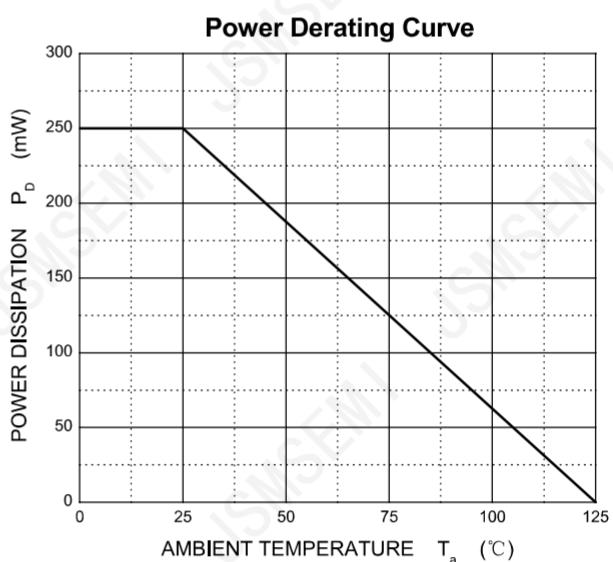
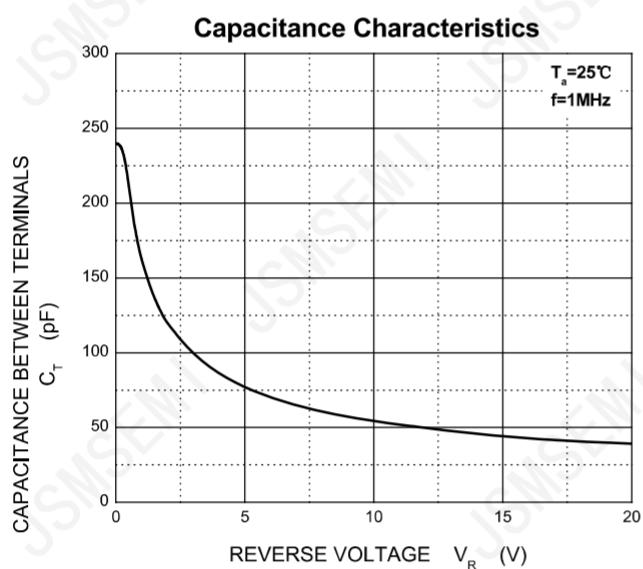
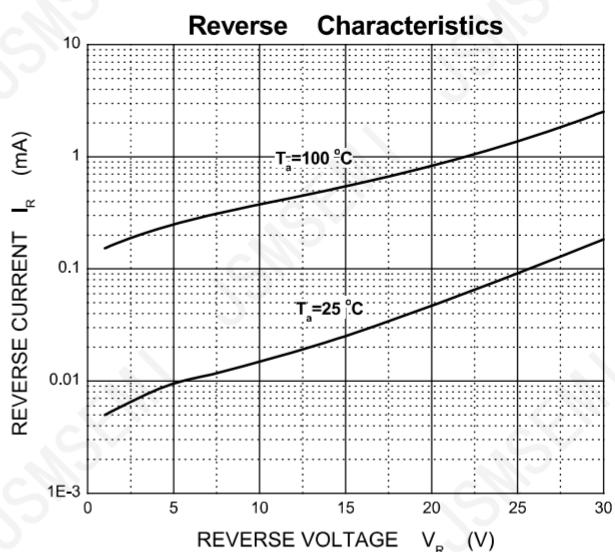
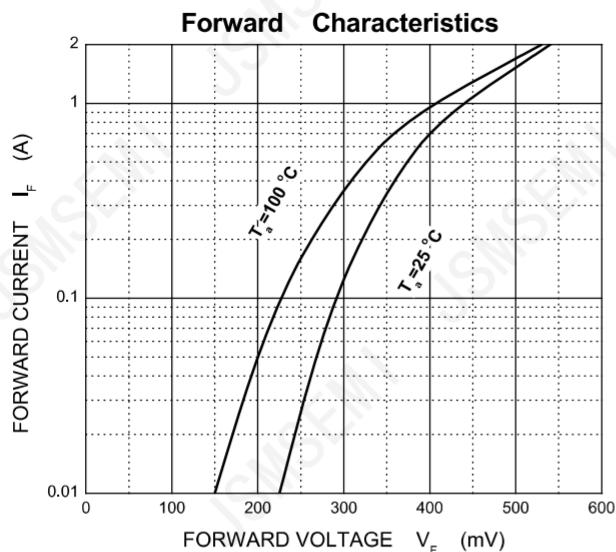
1:Device mounted on an FR4 PCB, single-sided copper, tin-plated and standard footprint.

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

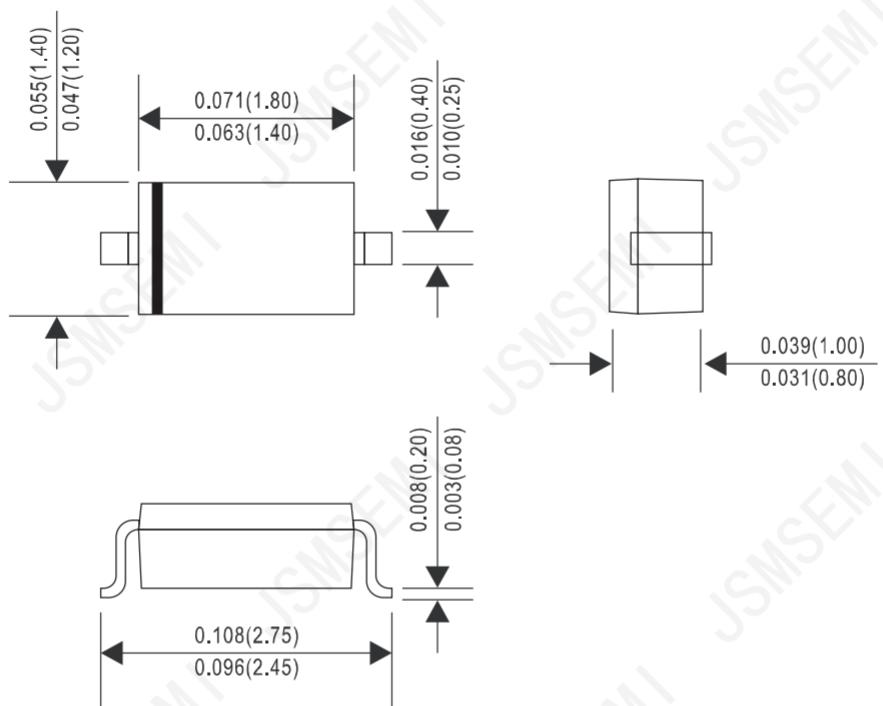
ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

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	μA
		$V_R=40\text{V}$			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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