



PRODUCT DATA SHEET



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Datasheet



Resources



Samples

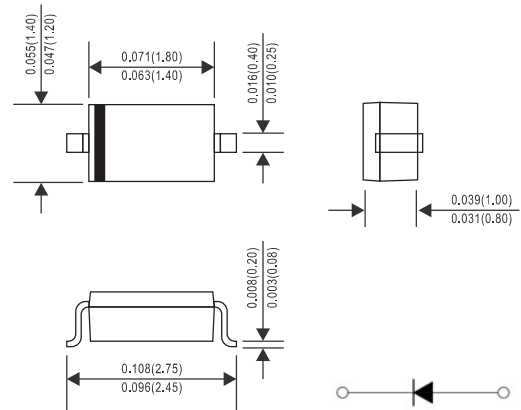
Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

SOD-323
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



Dimensions in inches and (millimeters)

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	250	mW
		Note2	480	
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	Note1	400	$^\circ\text{C/W}$
		Note2	208	
T_j	Operating Junction Temperature Range	-40 ~ +125	$^\circ\text{C}$	
T_{stg}	Storage Temperature Range	-55 ~ +150	$^\circ\text{C}$	

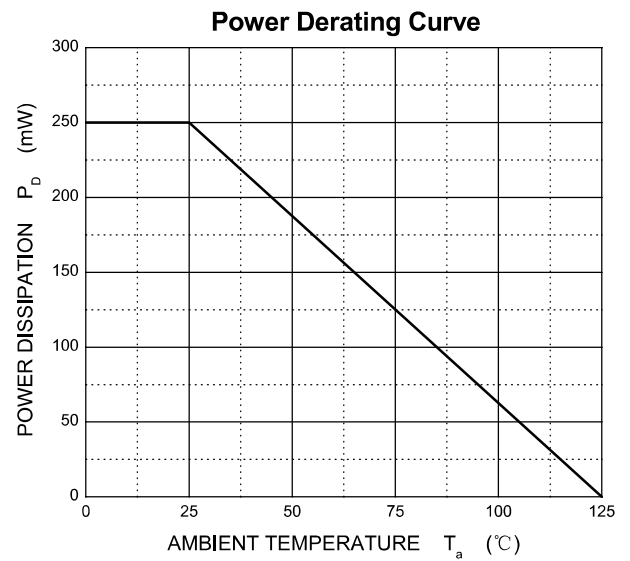
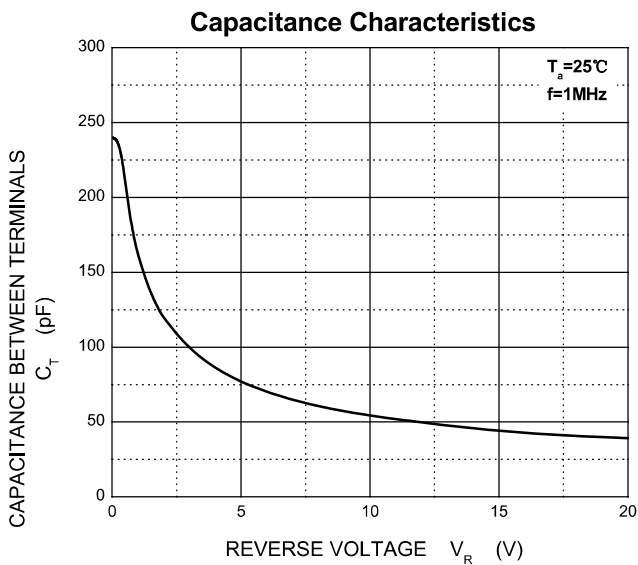
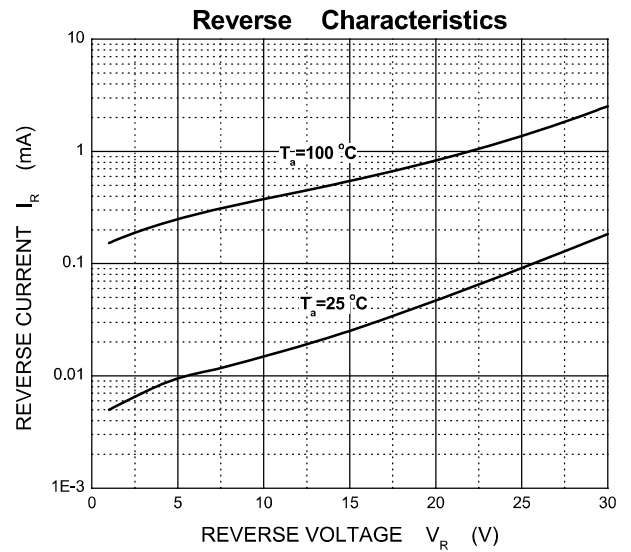
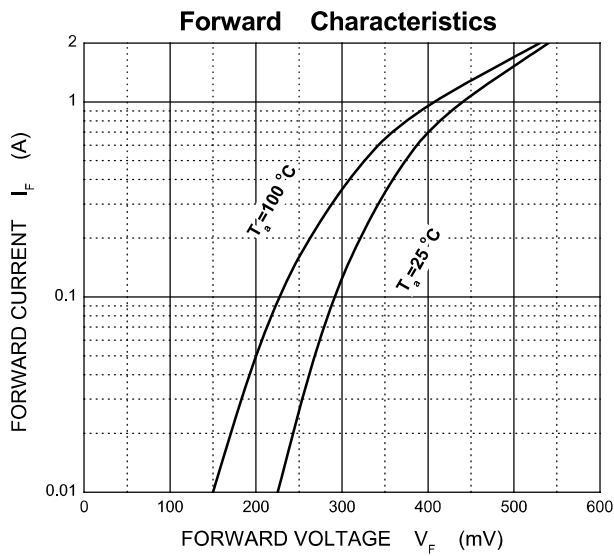
1: Device mounted on an FR4 PCB, single-sided copper, tin-plated and standard footprint.

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	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


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