

# SOD-323 SURFACE MOUNT Very Small Outline Flat Lead Plastic Package Schottky Barrier Diode

## **Absolute Maximum Ratings** $T_A = 25^{\circ}\text{C}$ unless otherwise noted

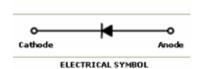
Symbol	Parameter	Value	Units	
T <sub>STG</sub>	Storage Temperature Range	-40 to +125	°C	
TJ	Operating Junction Temperature	+125	°C	
$\mathbf{V}_{RRM}$	Repetitive Peak Reverse Voltage	45	V	
$\mathbf{V}_{R}$	Reverser Voltage (DC)	40	V	
I <sub>F(AV)</sub>	Average Forward Rectified Current	100	mA	
I <sub>FSM</sub>	Peak Forward Surge Current (60Hz/1cyc)	1	Α	

These ratings are limiting values above which the serviceability of the diode may be impaired.

## **Green Product**



SOD-323 Flat Lead



#### **Specification Features:**

- Low Forward Voltage Drop
- Flat Lead SOD-323 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Terminal Finish
- Band Indicates Cathode

#### **DEVICE MARKING CODES:**

DEVICE MARKING CODEC.						
Device Type	Device Marking					
RB500V-40	<b>5</b>					

### **Electrical Characteristics** $T_A = 25$ °C unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit
	Faianietei		Min	Max	Oill
I <sub>R</sub>	Reverse Leakage Current	V <sub>R</sub> =10V	-	1	uA
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> =10mA	-	0.45	Volts
Ct	Capacitance	V <sub>R</sub> =10V, f=1M <sub>HZ</sub>	<b>Typ.</b> 6.0		pF

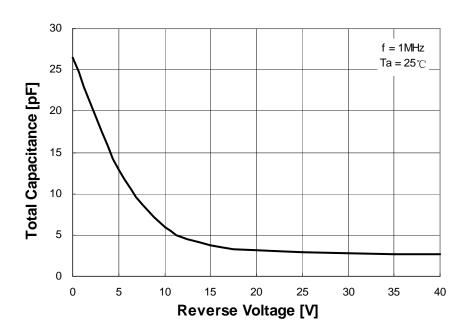
Number: DB-227

July 2011 Release, Revision A

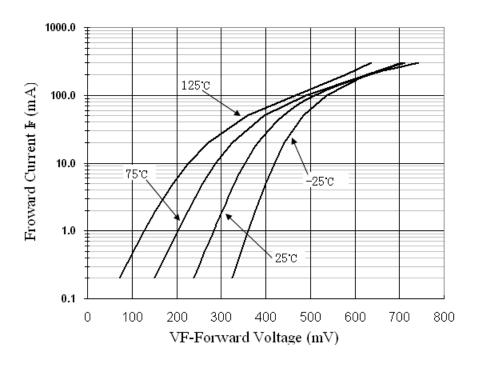


### **Typical Performance Characteristics**

### **Total Capacitance**



## **Forward Voltage vs Ambient Temperature**

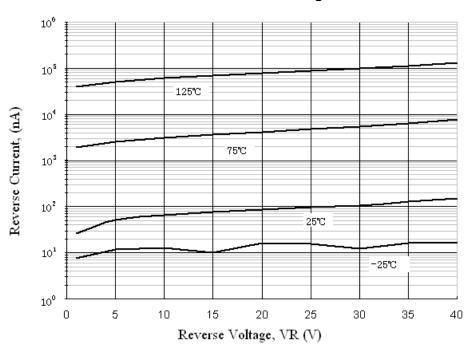


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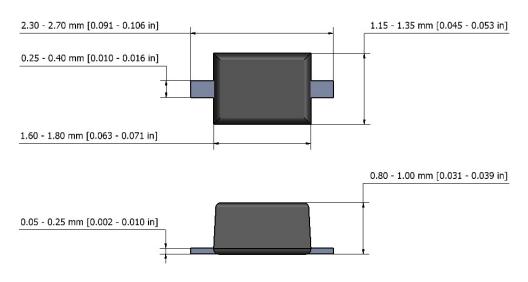
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### Reverse Current vs Reverse VoltageReverse



### **SOD-323 Package Outline**



#### NOTES:

- 1. The above package outline is similar to JEITA SC-90.
- 2. Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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### **NOTICE**

The information presented in this document is for reference only. Tak Cheong reserves the right to make changes without notice for the specification of the products displayed herein.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damagers resulting from such improper use of sale.

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