

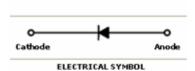
**SEMICONDUCTOR** 

# 200mW SOD-323 SURFACE MOUNT Small Outline Flat Lead Plastic Package Schottky Barrier Diode

# Green Product



SOD-323 Flat Lead



**Absolute Maximum Ratings**  $T_A = 25$ °C unless otherwise noted

Symbol	Parameter		Value	Units	
P <sub>D</sub>	Power Dissipation	200	mW		
T <sub>STG</sub>	Storage Temperature Range	-65 to +125	°C		
TJ	Operating Junction Temperature	+125	°C		
	Repetitive Peak Reverse Voltage	SD103AWS	40	V	
$V_{RM}$		SD103BWS	30	V	
		SD103CWS	20	V	
I <sub>F(AV)</sub>	Average Forward Rectified Current	200	mA		
I <sub>FSM</sub>	Peak Forward Surge Current (10uS square wave)		2	А	

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

### **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
- Weight: approx. 0.004g

#### **DEVICE MARKING CODE:**

Device Type	Device Marking		
SD103AWS	JV		
SD103BWS	JW		
SD103CWS	JX		

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

Symbol	Parameter		Test Condition	Limits			Unit
				Min	Тур	Max	Onit
	Reverse Leakage Current	SD103AWS	V <sub>R</sub> =30V				
I <sub>R</sub>		SD103BWS	V <sub>R</sub> =20V			5	μΑ
		SD103CWS	V <sub>R</sub> =10V				
V <sub>F</sub>	Forward Voltage		I <sub>F</sub> =20mA I <sub>F</sub> =200mA			0.37 0.60	Volts
Ct	Junction Capacitance		V <sub>R</sub> =0V f= 1MHz		50		pF

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# **Typical Characteristics**

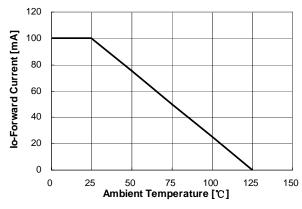


Figure 1. Forward Current Derating Curve

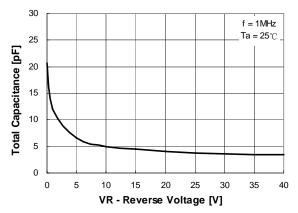


Figure 2. Total Capacitance

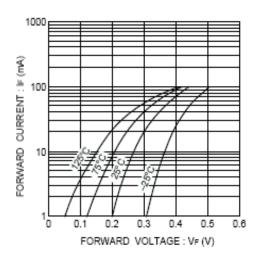


Figure 3. Forward Characteristics

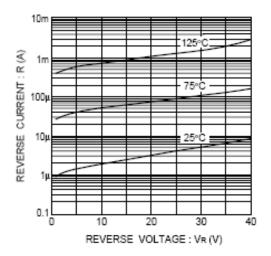
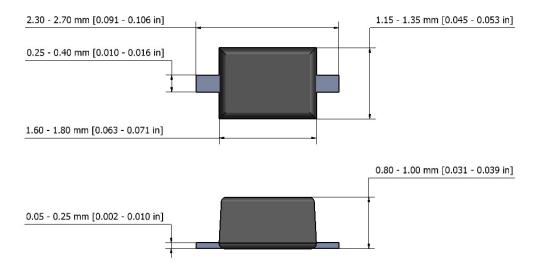


Figure 4. Forward Characteristics



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



#### NOTES:

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





# **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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