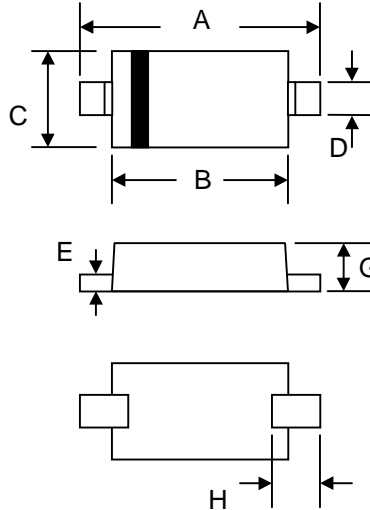


# SD103AWS – SD103CWS

## SURFACE MOUNT SCHOTTKY BARRIER DIODE

### Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-O



SOD-323		
Dim	Min	Max
A	2.30	2.70
B	1.75	1.95
C	1.15	1.35
D	0.25	0.35
E	0.05	0.15
G	0.70	0.95
H	0.30	—

All Dimensions in mm

### Mechanical Data

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)
- Marking: SD103AWS S6  
SD103BWS S7  
SD103CWS S8

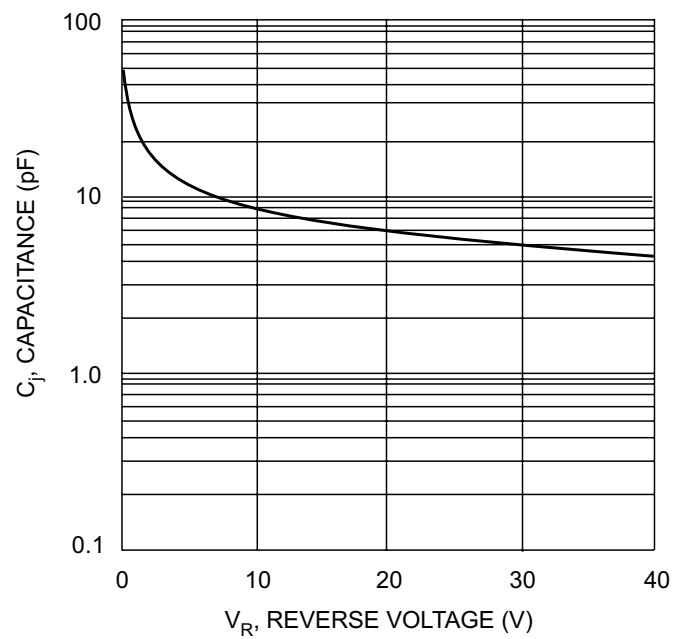
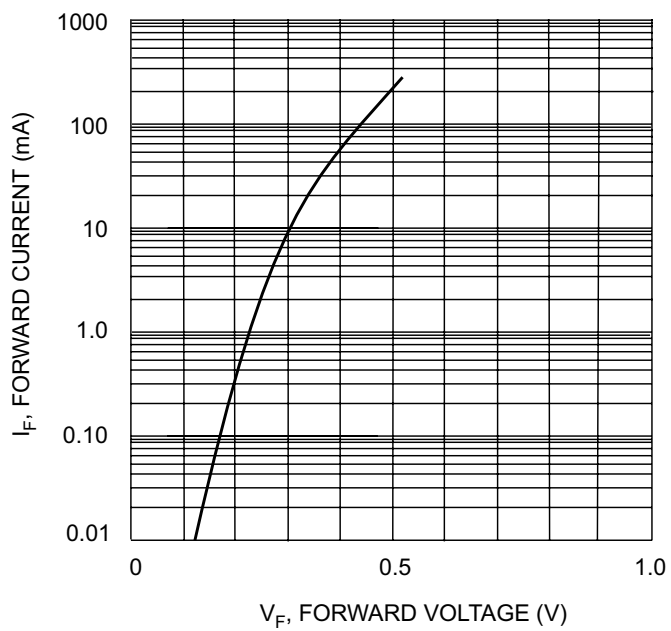
### Maximum Ratings @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	40	30	20	V
Working Peak Reverse Voltage	V <sub>RWM</sub>				
DC Blocking Voltage	V <sub>R</sub>				
Forward Continuous Current (Note 1)	I <sub>F</sub>	350			mA
Non-Repetitive Peak Forward Surge Current @ t < 1.0s	I <sub>FSM</sub>	2.0			A
Power Dissipation (Note 1)	P <sub>d</sub>	200			mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	625			°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +125			°C

### Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	All Types	Unit	Test Condition
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	40 30 20	V	@ I <sub>R</sub> = 10μA, t <sub>p</sub> < 300μS
Forward Voltage Drop	V <sub>FM</sub>	0.37 0.60	V	@ I <sub>F</sub> = 20mA @ I <sub>F</sub> = 200mA
Peak Reverse Leakage Current	I <sub>RM</sub>	5.0	μA	@ Rated DC Blocking Voltage
Typical Junction Capacitance	C <sub>j</sub>	50	pF	V <sub>R</sub> = 0V, f = 1.0MHz
Typical Reverse Recovery Time	t <sub>rr</sub>	10	nS	I <sub>F</sub> = I <sub>R</sub> = 200mA I <sub>RR</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω

Note: 1. Valid provided that terminals are kept at ambient temperature.



## ORDERING INFORMATION

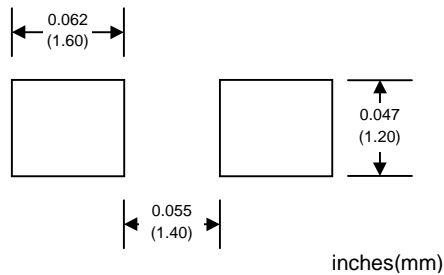
Product No.♦	Package Type	Shipping Quantity
<b>SD103AWS-T1</b>	SOD-323	3000/Tape & Reel
SD103AWS-T3	SOD-323	10000/Tape & Reel
<b>SD103BWS-T1</b>	SOD-323	3000/Tape & Reel
SD103BWS-T3	SOD-323	10000/Tape & Reel
<b>SD103CWS-T1</b>	SOD-323	3000/Tape & Reel
SD103CWS-T3	SOD-323	10000/Tape & Reel

Products listed in **bold** are WTE **Preferred** devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

## RECOMMENDED FOOTPRINT



Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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*We power your everyday.*