

SD103AW – SD103CW

А

В

# SURFACE MOUNT SCHOTTKY BARRIER DIODE

D

SOD-123

Max

3.9

2.8

1.8

0.7

0.2

\_\_\_\_\_

1.35

0.12

Min

3.6

2.5

1.4

0.5

0.4

0.95

All Dimensions in mm

Dim

Α

В

С

D

Ε

G

н

J

### **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



- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.01 grams (approx.)
- Marking: SD103AW S6
  - SD103BW S7 SD103CW S8
- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4

## Maximum Ratings $@T_A=25^{\circ}C$ unless otherwise specified

Characteristic	Symbol	SD103AW	SD103BW	SD103CW	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	40 30 20			v
Forward Continuous Current (Note 1)	lf	350			mA
Non-Repetitive Peak Forward Surge Current @t < 1.0s	IFSM	2.0			А
Power Dissipation	Pd	410		mW	
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	RθJA	300			°C/W
Operating and Storage Temperature Range	Tj, Tstg	-65 to +125			°C

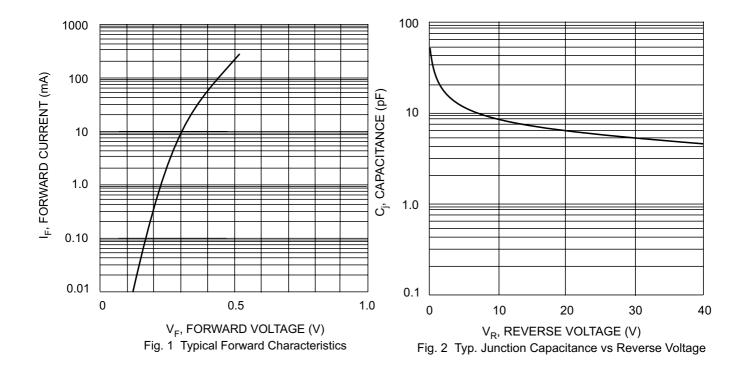
C

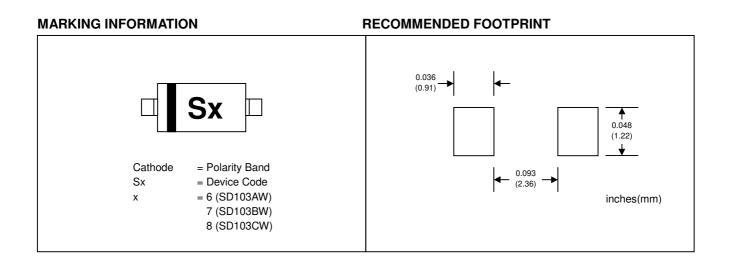
E

## **Electrical Characteristics** $@T_A=25^{\circ}C$ unless otherwise specified

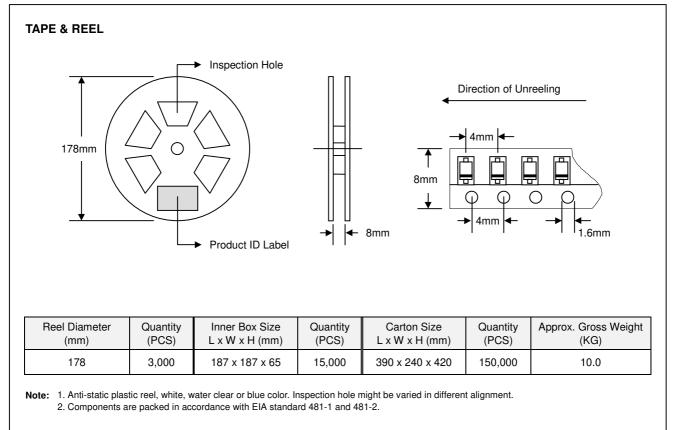
Characteristic	Symbol	All Types	Unit	Test Condition	
Forward Voltage Drop	Vгм	0.37 0.60	v	@ IF = 20mA @ IF = 200mA	
Peak Reverse Leakage Current	IRM	5.0	μA	@ Rated DC Blocking Voltage	
Typical Junction Capacitance	Cj	50	pF	V <sub>R</sub> = 0V, f = 1.0MHz	
Typical Reverse Recovery Time	trr	10	nS	IF = IR = 50mA to 200mA IRR = 0.1 x IR, RL = 100 $\Omega$	

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





#### PACKAGING INFORMATION



#### ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SD103AW-T1	SOD-123	3000/Tape & Reel
SD103BW-T1	SOD-123	3000/Tape & Reel
SD103CW-T1	SOD-123	3000/Tape & Reel

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

2. To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SD103AW-T1-LF.

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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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