

# SD103AW - SD103CW

400mW Schottky Barrier Switching Diode



**SOD-123**

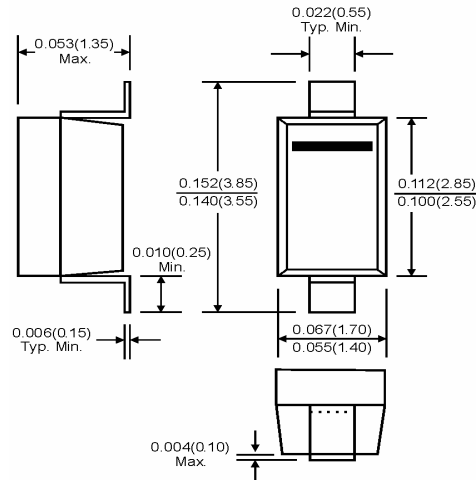


## Features

- ✧ Low forward voltage drop
- ✧ Guard ring construction for transient protection
- ✧ Negligible reverse recovery time
- ✧ Low reverse capacitance

## Mechanical Data

- ✧ Case: SOD-123, plastic
- ✧ Polarity: Cathode band
- ✧ Terminals: Solderable per MIL-STD-202, Method 208
- ✧ Marking: Date Code and Type Code or Date Code only
  - Type Code: SD103AW S4
  - SD103BW S5
  - SD103CW S6
- ✧ Weight: 0.01 grams (approx.)



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

### Maximum Ratings

Type Number	Symbol	SD103AW	SD103BW	SD103CW	Units
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>				
Working Peak Reverse Voltage	V <sub>VRM</sub>	40	30	20	V
DC Blocking Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	21	14	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>	350			mA
Non-repetitive Peak Forward Surge Current @ t ≤ 1.0s	I <sub>FSM</sub>	1.5			A
Power Dissipation (Note 1)	P <sub>d</sub>	400			mW
Thermal Resistance Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	300			°C /W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to + 125			°C

### Electrical Characteristics

Type Number	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage (Note 2) SD103AW IR=100uA SD103BW IR=100uA SD103CW IR=100uA	V <sub>(BR)</sub>	40 30 20		-	V
Peak Reverse Current SD103AW VR=30V SD103BW VR=20V SD103CW VR=10V	I <sub>R</sub>	-	-	5.0	uA
Forward Voltage Drop	V <sub>F</sub>		-	0.37 0.60	V
Junction Capacitance VR=0, f=1.0MHz	C <sub>j</sub>	-	50	-	pF
Reverse Recovery Time IF=IR=200mA Irr=0.1 x IR, RL=100Ω	t <sub>rr</sub>	-	10	-	nS

Notes: 1. Valid Provided that Terminals are Kept at Ambient Temperature.

2. Pulse Test: Pulse width = 300uS, Duty cycle ≤ 2%..

Version: A07

RATINGS AND CHARACTERISTIC CURVES (SD103AW - SD103CW)

