



SD103AW THRU SD103CW

Schottky Barrier Switching Diode



Voltage Range
20 to 40 Volts
400m Watts Power Dissipation

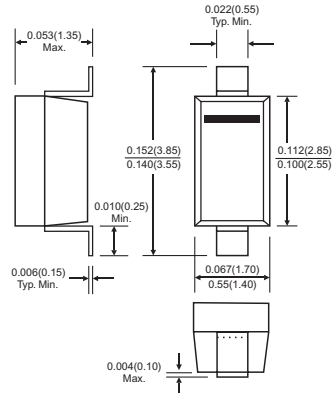
Features

- ✧ 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.)

SOD-123



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_{RRM}				
Working Peak Reverse Voltage	V_{RWM}	40	30	20	V
DC Blocking Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current (Note 1)	I_{FM}	350			mA
Non-repetitive Peak Forward Surge Current @ $t \leq 1.0s$	I_{FSM}	1.5			A
Power Dissipation (Note 1)	P_d	400			mW
Thermal Resistance Junction to Ambient Air (Note 1)	$R \theta_{JA}$	300			°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 125			°C

Electrical Characteristics

Type Number	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage (Note 2) SD103AW $I_R=100\mu A$ SD103BW $I_R=100\mu A$ SD103CW $I_R=100\mu A$	$V_{(BR)}$	40 30 20	-	-	V
Peak Reverse Current SD103AW $V_R=30V$ SD103BW $V_R=20V$ SD103CW $V_R=10V$	I_R	-	-	5.0	μA
Forward Voltage Drop	V_F	-	-	0.37 0.60	V
Junction Capacitance $V_R=0, f=1.0MHz$	C_j	-	50	-	Pf
Reverse Recovery Time $I_F=I_R=200mA$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$	t_{rr}	-	10	-	nS

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

2. Pulse Test: Pulse width = 300 μS , Duty cycle $\leq 2\%$.

RATINGS AND CHARACTERISTIC CURVES (SD103AW - SD103CW)

FIG.1- TYPICAL FORWARD CHARACTERISTICS

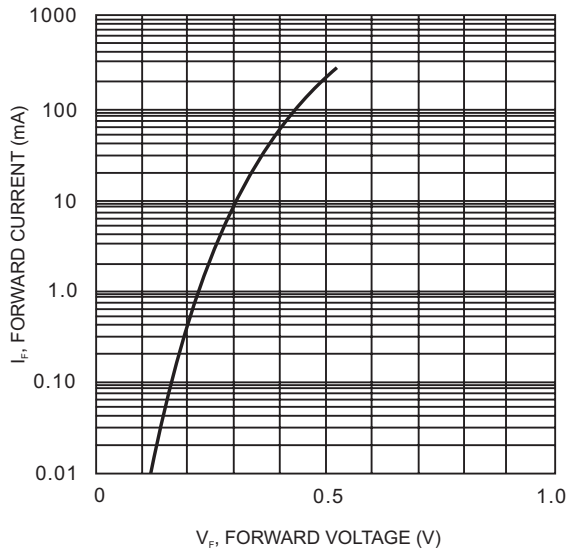


FIG.2- JUNCTION CAPACITANCE VS REVERSE VOLTAGE

