



# SD103AWT THRU SD103WT

Reverse Voltage 20~40 Volts Forward Current - 2 Ampere

## FAST SWITHING DIODES

### Features

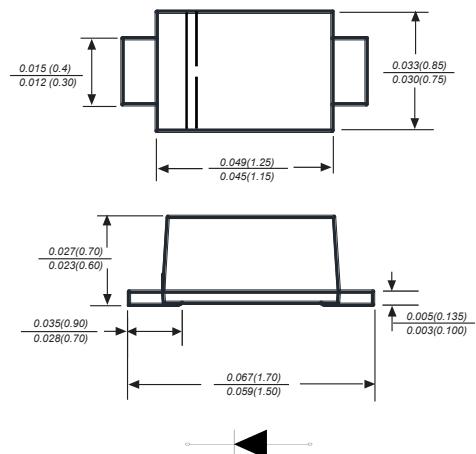
- ◆ Low Forward Voltage

### Mechanical Data

Case\*: JEDEC SOD-523 molded plastic body  
 Terminals\*: Solderable per MIL-STD-750, Method 2026  
 Polarity\*: Color band denotes cathode end  
 Mounting Position\*: Any  
 Weight : 0.0007 ounce, 0.02 grams  
 Marking;S4

SOD-523

RoHS  
COMPLIANT



Dimensions in inches and (millimeters)

### Absolute Maximum Ratings at 25 °C

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage SD103AWT SD103BWT SD103CWT	V <sub>RRM</sub>	40	V
		30	
		20	
Reverse Voltage SD103AWT SD103BWT SD103CWT	V <sub>R</sub>	40	V
		30	
		20	
Average Forward Rectified Current	I <sub>F(AV)</sub>	350	mA
Non-Repetitive Peak Forward Surge Current at t = 1 s	I <sub>FSM</sub>	2	A
Power Dissipation	P <sub>tot</sub>	200	mW
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	- 65 to + 125	°C

### Characteristics at Ta= 25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at I <sub>R</sub> =10uA SD103AWT SD103BWT SD103CWT	V <sub>(BR)R</sub>	40	-	-	V
		30	-	-	
		20	-	-	
Reverse Leakage Current at V <sub>R</sub> =30 V at V <sub>R</sub> = 20 V at V <sub>R</sub> = 10 V SD103AWT SD103BWT SD103CWT	I <sub>R</sub>	-	-	5	µA
		-	-	5	
		-	-	5	
Forward Voltage at I <sub>F</sub> = 20 mA at I <sub>F</sub> = 200 mA	V <sub>F</sub>	-	-	0.37	V
		-	-	0.6	
Total Capacitance at V <sub>R</sub> = 0 V, f = 1 MHz	C <sub>T</sub>	-	50	-	pF
Reverse Recovery Time at I <sub>F</sub> = I <sub>R</sub> = 200 mA, I <sub>rr</sub> = 0.1 I <sub>R</sub> , R <sub>L</sub> = 100 Ω	t <sub>rr</sub>	-	10	-	ns



## Typical Characteristics

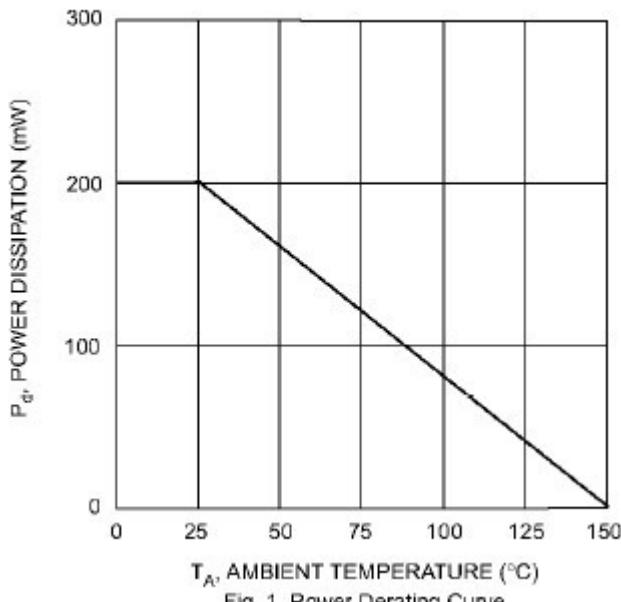


Fig. 1 Power Derating Curve

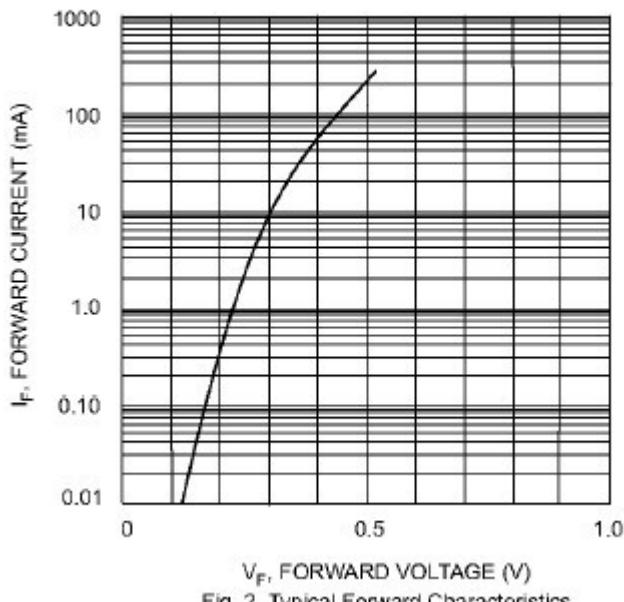


Fig. 2 Typical Forward Characteristics

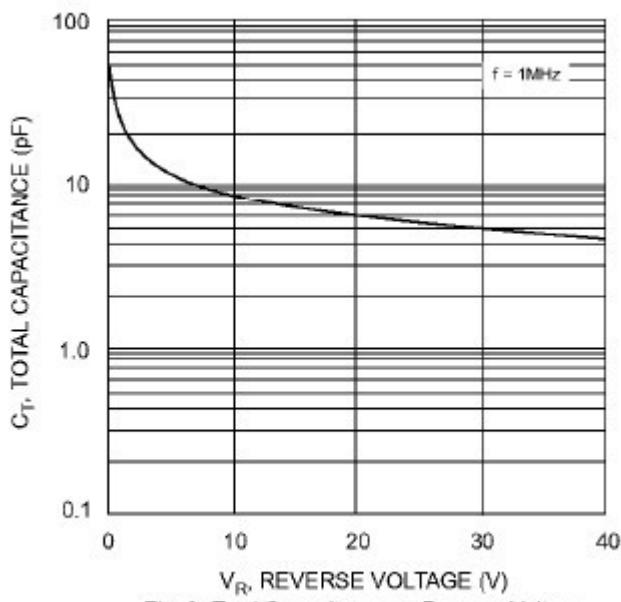


Fig. 3 Total Capacitance vs Reverse Voltage

The curve above is for reference only.