

## Schottky Barrier Diode

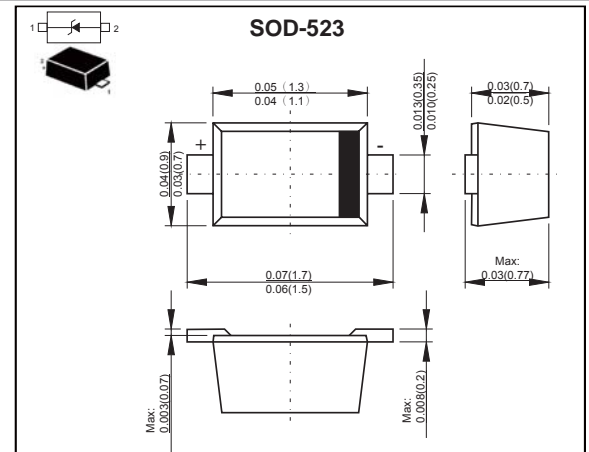
VOLTAGE RANGE: 40V PEAK PULSE POWER:150mW

### Features

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

### MECHANICAL DATA

- Case: SOD-523 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



## MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Parameter	Symbol	Rating	Unit
Peak repetitive peak reverse voltage	V <sub>RRM</sub>	40	V
Working peak	V <sub>RWM</sub>		
DC blocking voltage	V <sub>R</sub>		
RMS reverse voltage	V <sub>R(RMS)</sub>	28	V
Forward continuous current	I <sub>FM</sub>	350	mA
Non-Repetitive Peak Forward Surge Current @t ≤ 1.0s	I <sub>FRM</sub>	1.5	A
Power Dissipation	P <sub>d</sub>	150	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	667	°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +125	°C

Notes: 1. Part mounted on FR-4 board with recommended pad layout

## Electrical Specification (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V (BR) <sub>R</sub>	I <sub>R</sub> = 100 μA	40			V
Forward Voltage Drop	V <sub>FM</sub>	I <sub>F</sub> = 20mA I <sub>F</sub> = 200mA			0.37 0.60	V
Peak Reverse Current	I <sub>RM</sub>	V <sub>R</sub> = 30V			5	μA
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> = 0V, f = 1.0MHz		50		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 200mA, I <sub>rr</sub> = 0.1 X I <sub>R</sub> , R <sub>L</sub> = 100 Ω		10		ns

# RATINGS AND CHARACTERISTIC CURVES

## Typical Characteristics

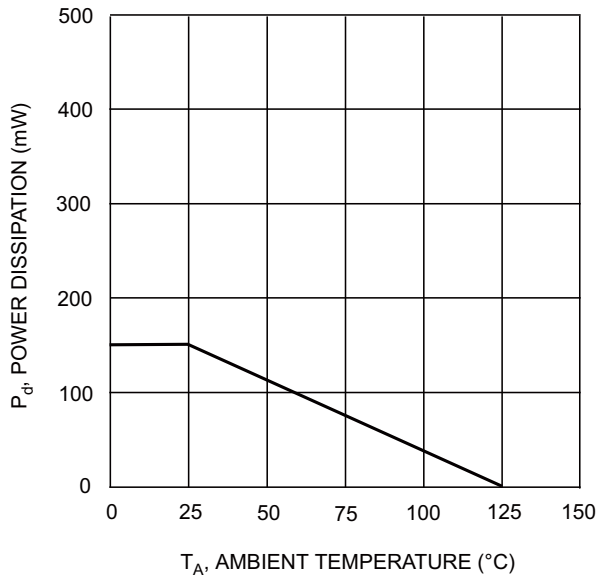


Fig. 1 Power Derating Curve

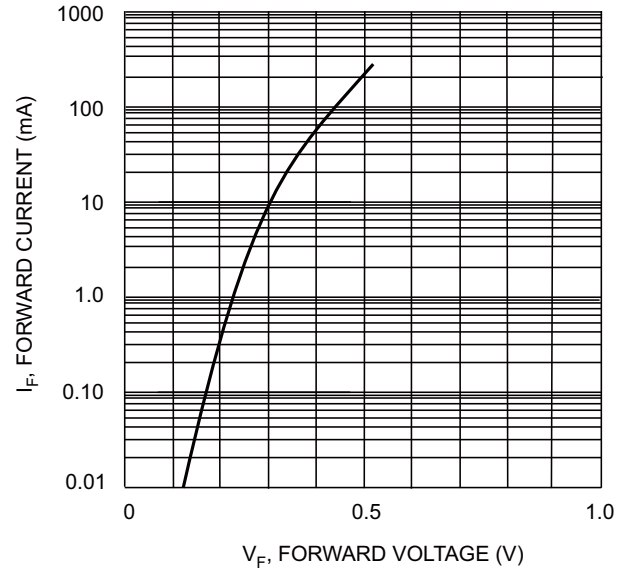


Fig. 2 Typical Forward Characteristics

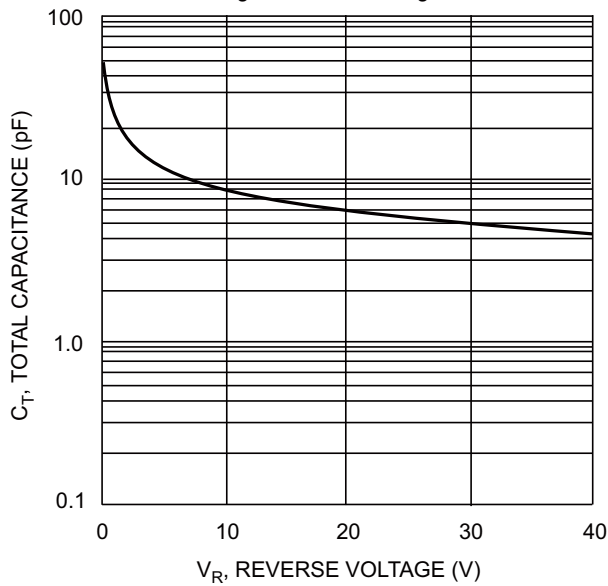


Fig. 3 Typ. Total Capacitance vs Reverse Voltage

### Ordering Information

Device	Packaging	Shipping
SD103AX	SOD-523	3000/Tape&Reel

### Marking Information

