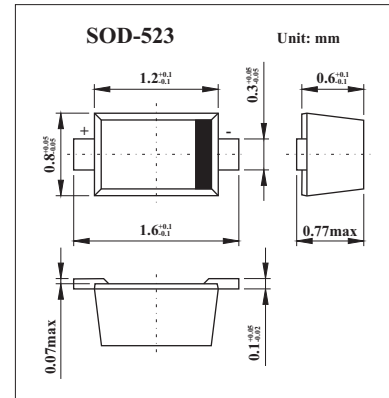


## Surface Mount Schottky Barrier Diode SD103AX

### ■ Features

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



### ■ Absolute Maximum Ratings Ta = 25°C

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

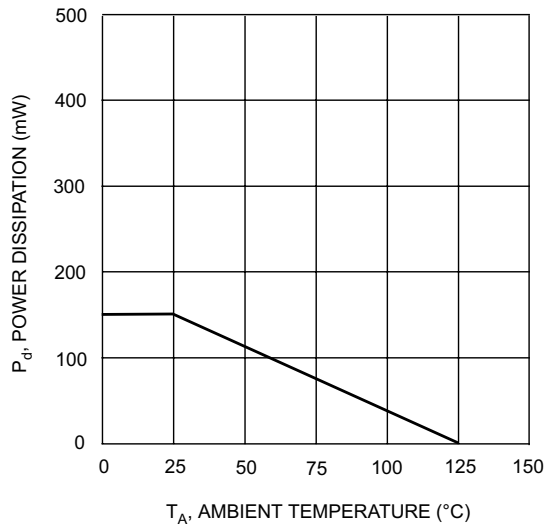
Notes: 1. Part mounted on FR-4 board with recommended pad layout

### ■ Electrical Characteristics Ta = 25°C

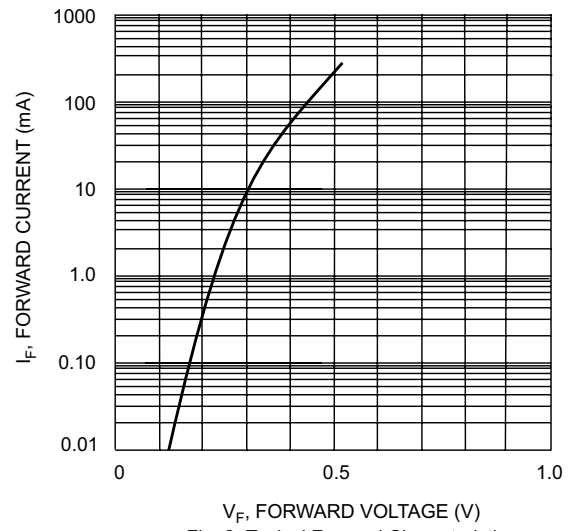
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>(BR)R</sub>	I <sub>R</sub> = 100 μA	40			V
Forward Voltage Drop	V <sub>FM</sub>	I <sub>F</sub> = 20mA I <sub>F</sub> = 200mA			0.37 0.60	V
Peak Reverse Current	I <sub>RM</sub>	V <sub>R</sub> = 30V			5	μA
Total Capacitance	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

# SD103AX

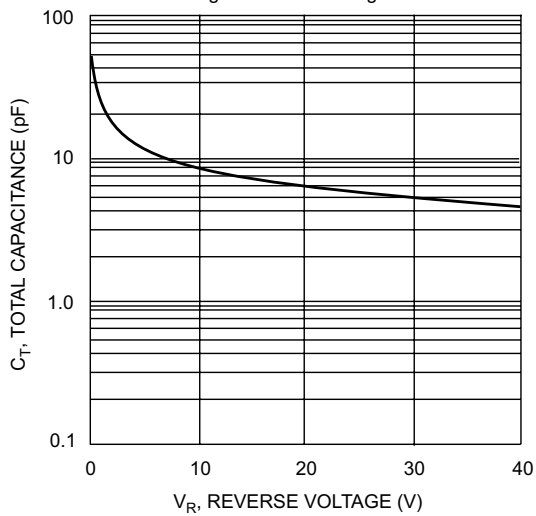
■ Typical Characteristics



T<sub>A</sub>, AMBIENT TEMPERATURE (°C)  
Fig. 1 Power Derating Curve



V<sub>F</sub>, FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics



V<sub>R</sub>, REVERSE VOLTAGE (V)  
Fig. 3 Typ. Total Capacitance vs Reverse Voltage

■ Ordering Information

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

■ Marking Information

