SD103AX

Schottky Barrier Diode

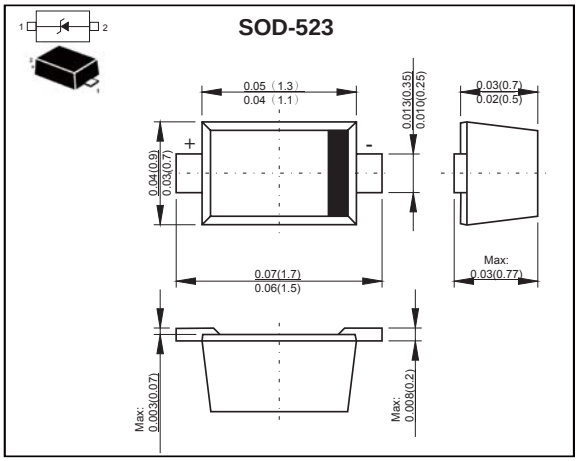
VOLTAGE RANGE: 40V PEAK PULSE POWER:150mW

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℃ ambient temperature unless otherwise specified

Parameter	Symbol	Rating	Unit
Peak repetitive peak reverse voltage Working peak DC blocking voltage	V_{RRM} V_{RWM} V_R	40	V
RMS reverse voltage	$V_{R(RMS)}$	28	V
Forward continuous current	I_{FM}	350	mA
Non-Repetitive Peak Forward Surge Curren @t≤1.0s	I_{FRM}	1.5	A
Power Dissipation	P_d	150	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	667	℃/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125	℃

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

Electrical Specification (T_A=25°C unless otherwise specified)

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)R}$	I_R=100μA	40			V
Forward Voltage Drop	V_{FM}	I_F = 20mA I_F = 200mA			0.37 0.60	V
Peak Reverse Current	I_{RM}	V_R = 30V			5	μA
Total Capacitance	C_T	V_R = 0V, f = 1.0MHz		50		pF
Reverse Recovery Time	t_{rr}	I_F = I_R = 200mA,I_{rr} = 0.1 X I_R, R_L = 100Ω		10		ns

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

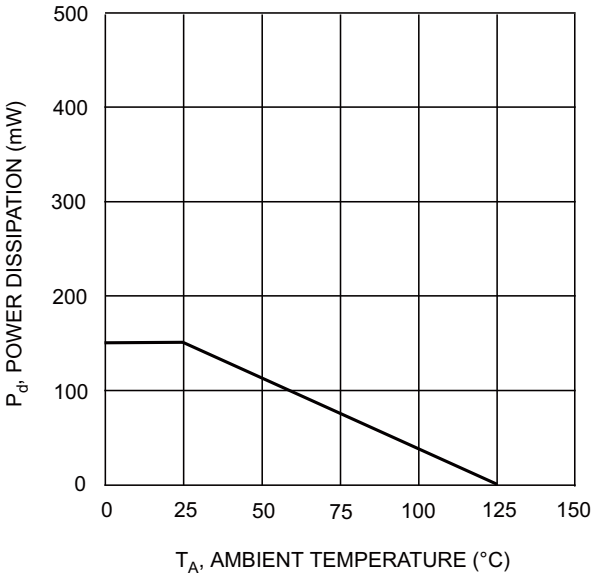


Fig.1 Power Derating Curve

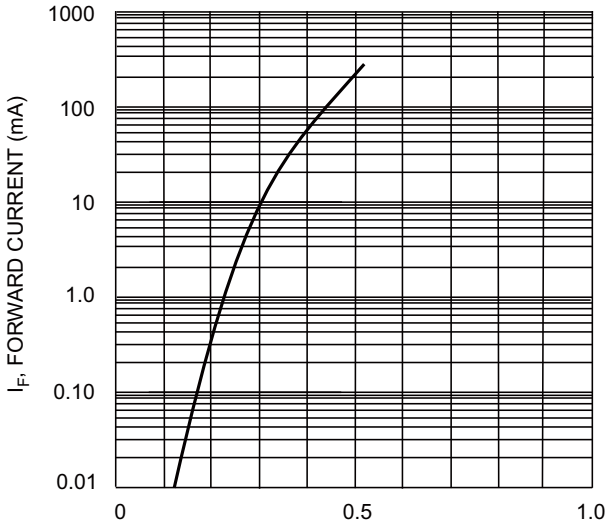


Fig. 2 Typical Forward Characteristics

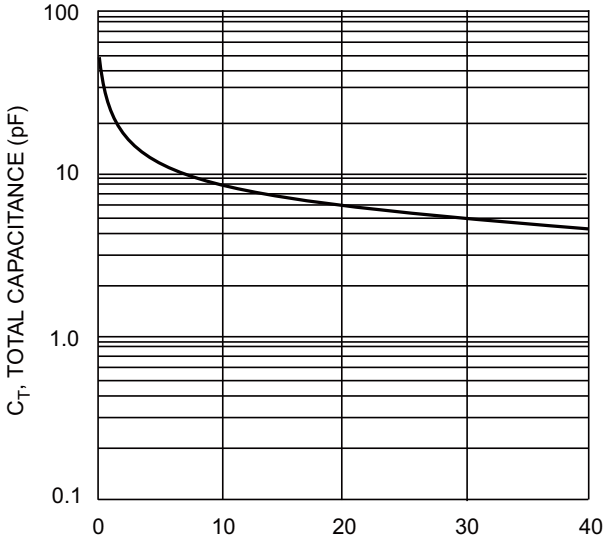


Fig. 3 Typ. Total Capacitance vs Reverse Voltage

■ Ordering Information

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

■ Marking Information