

■ Schottky Barrier Diode

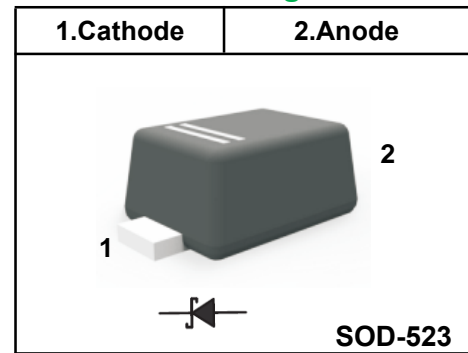
Features

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

APPLICATIONS

- Schottky barrier application.

Pinning



Marking Code

SD103AX	S4
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MAIMUM RATING TA = 25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
DC Reverse voltage	V_R	40	V
Continuous forward current	I_F	350	mA
Repetitive peak forward current @ $t \leq 1.0s$	I_{FRM}	1	A
Total power dissipation	P_{tot}	400	mW
Total resistance junction to ambient	$R_{\theta JA}$	300	°C/W
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-65-125	°C

Electrical Characteristics TA = 25°C unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)R}$	40			V	$I_R=100\mu A$
Forward voltage	V_F			0.37 0.60	V	$I_F=20mA$ $I_F=200mA$
Reverse current	I_R			5.0	μA	$V_R=30V$
Diode capacitance	C_d		50		pF	$V_R=0V, f=1MHz$
Reverse recovery time	t_{rr}		10		ns	$I_F=I_R=50mA, R_L=100\Omega$

TYPICAL Characteristics TA = 25°C unless otherwise specified

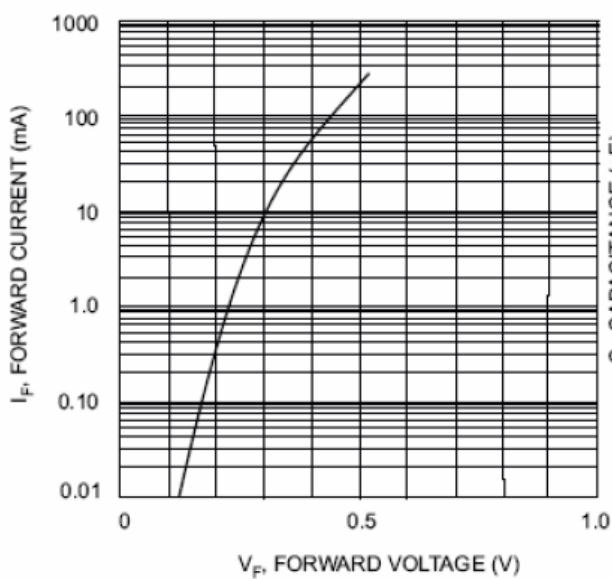


Fig. 1 Typical Forward Characteristics

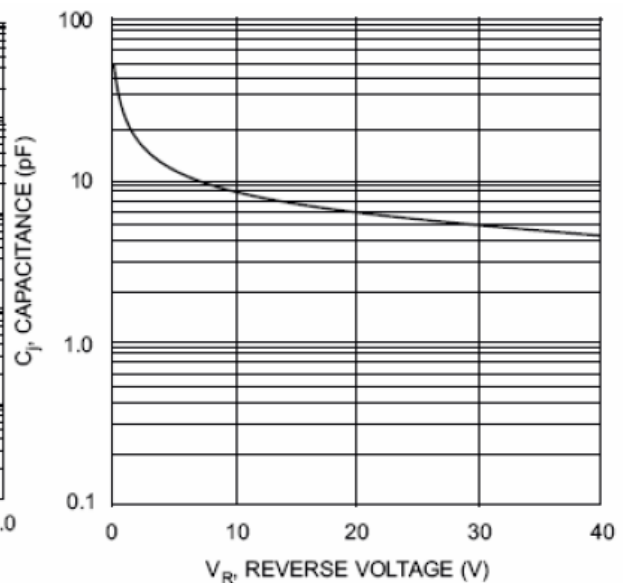


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

Ordering information

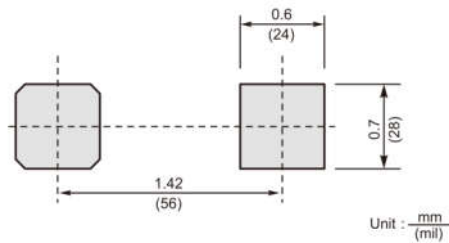
Package	Packing Description	Packing Quantity
SOD-523	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-523

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.51	0.77	20	30
e	0.25	0.35	10	14
C	0.08	0.15	3	6
D	1.10	1.30	43	51
E	0.75	0.99	30	39
HE	1.50	1.70	59	67
N	0.35ref		14ref	
L	0.2ref		8ref	
P	R0.1 ALL ROUND		R4.0 ALL ROUND	
∠	10°			

The recommended mounting pad size



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