



SD103AX SD103BX SD103CX

Schottky Barrier Diode

Reverse Voltage - 20V to 40V Forward Current - 0.35A

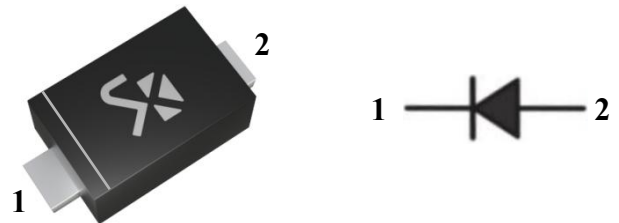
Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance

Application

- Schottky Barrier Switching

Ordering Information



SOD-523

Ordering Number	Marking	Package
SD103AX	S4	SOD-523
SD103BX	S5	SOD-523
SD103CX	S6	SOD-523

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	SD103AX	SD103BX	SD103CX	Units
Repetitive Peak Reverse Voltage	V_{RRM}	40	30	20	V
Working Voltage	V_{RWM}	40	30	20	V
DC Reverse Voltage	V_R	40	30	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current	I_F	350			mA
Repetitive Peak Forward Current@ $t \leq 1.0\text{s}$	I_{FRM}	1.5			A
Power Dissipation	P_D	400			mW
Operating Junction Temperature Range	T_J	$-40 \sim +125$			$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	$-65 \sim +120$			$^{\circ}\text{C}$
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	300			$^{\circ}\text{C/W}$

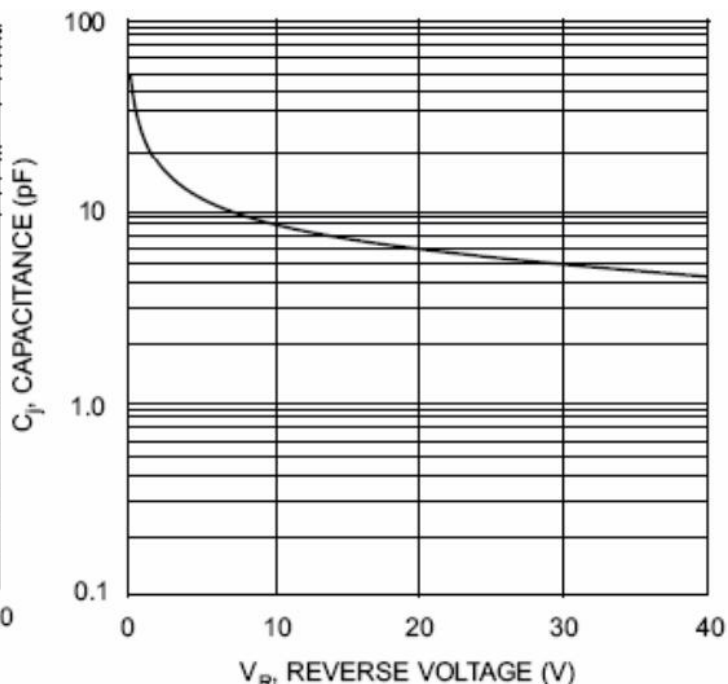
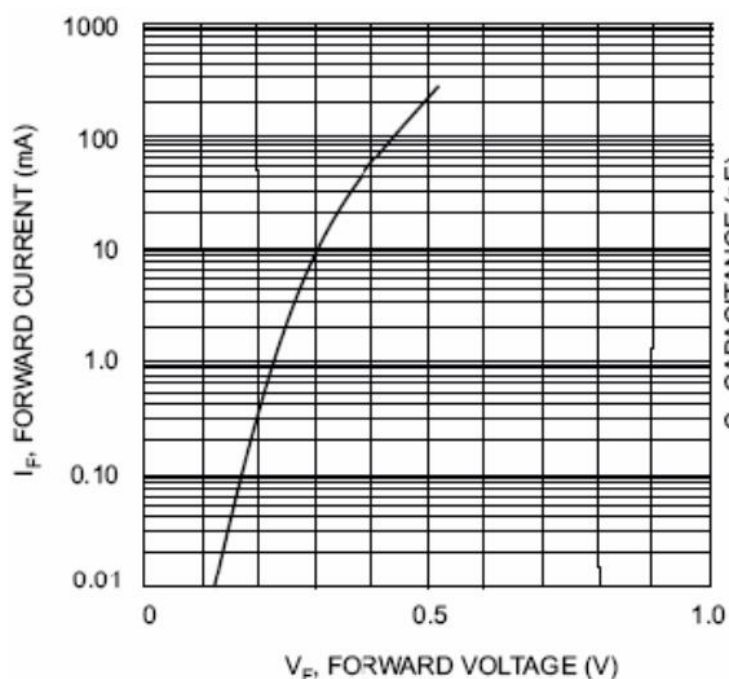


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Electrical Characteristics($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter		Conditions	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage	SD103AX	$I_R=10\mu\text{A}$	$V_{(BR)R}$	40	-	-	V
	SD103BX	$I_R=10\mu\text{A}$		30	-	-	
	SD103CX	$I_R=10\mu\text{A}$		20	-	-	
Forward Voltage		$I_F=20\text{mA}$	V_F	-	-	0.37	V
		$I_F=200\text{mA}$		-	-	0.60	
Reverse Current	SD103AX	$V_R=30\text{V}$	I_R	-	-	5.0	μA
	SD103BX	$V_R=20\text{V}$		-	-	5.0	
	SD103CX	$V_R=10\text{V}$		-	-	5.0	
Capacitance Between Terminals		$V_R=0, f=1\text{MHz}$	C_T	-	-	50	pF
Reverse Recovery Time		$I_R=I_F=200\text{mA}$, $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$	t_{rr}	-	-	10	ns

Typical Characteristic($T_A=25^\circ\text{C}$ unless otherwise specified)



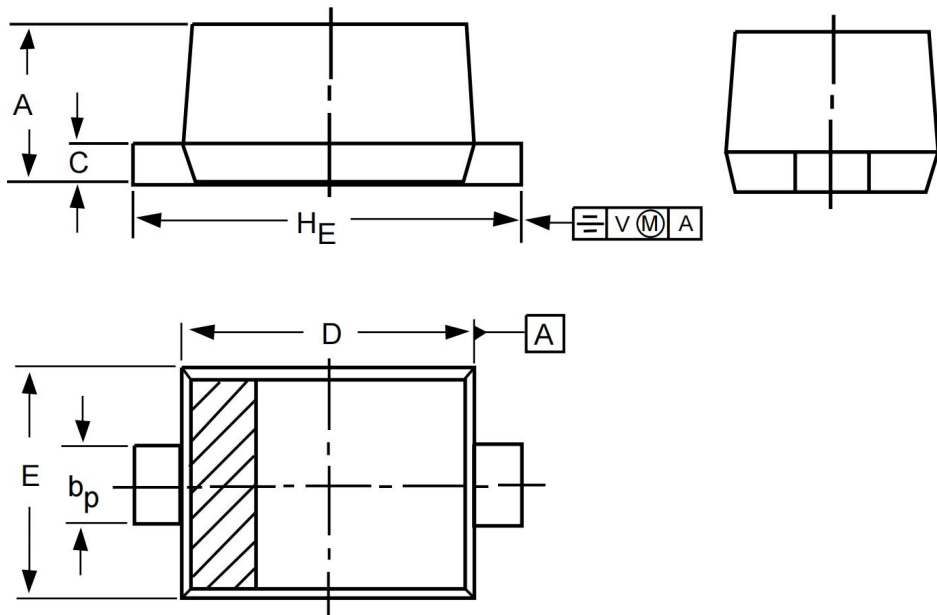


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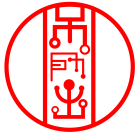
Package Information

SOD-523

Dimensions in mm



Unit	A	b _p	C	D	E	H _E	V
mm	0.7	0.35	0.2	1.3	0.9	1.7	0.15
	0.5	0.25	0.1	1.1	0.7	1.5	



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