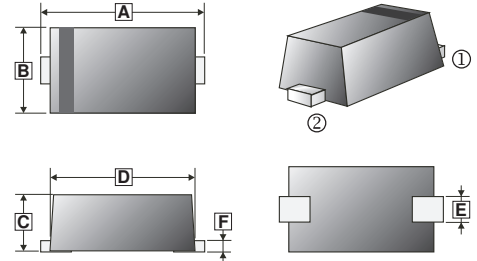


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

**FEATURES**

- Low Forward Voltage Drop
- Extremely Fast Switching Speed
- Low Reverse Capacitance

**SOD-523**



**MARKING**

**SD**

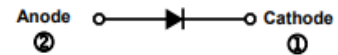
**PACKAGE INFORMATION**

Package	MPQ	Leader Size
SOD-523	8K	7 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.50	1.70	D	1.10	1.30
B	0.70	0.90	E	0.25	0.35
C	0.50	0.77	F	0.07	0.20

**ORDERING INFORMATION**

Part Number	Type
SCS0520X	Lead free
SCS0520X-C	Halogen free & Lead free



**ABSOLUTE MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$  unless otherwise specified)

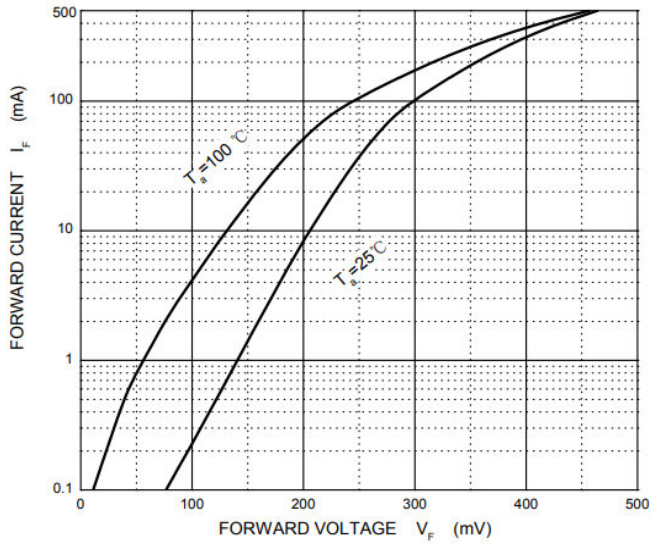
Parameter	Symbol	Ratings	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	20	V
DC Blocking Voltage	$V_R$	20	V
Forward Current	$I_F$	0.5	A
Non-repetitive Peak Forward Current@ t=8.3ms	$I_{FSM}$	5.5	A
Power Dissipation	$P_D$	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667	$^\circ\text{C} / \text{W}$
Junction & Storage temperature	$T_J, T_{STG}$	125, -55~150	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS** ( $T_A=25^\circ\text{C}$  unless otherwise specified)

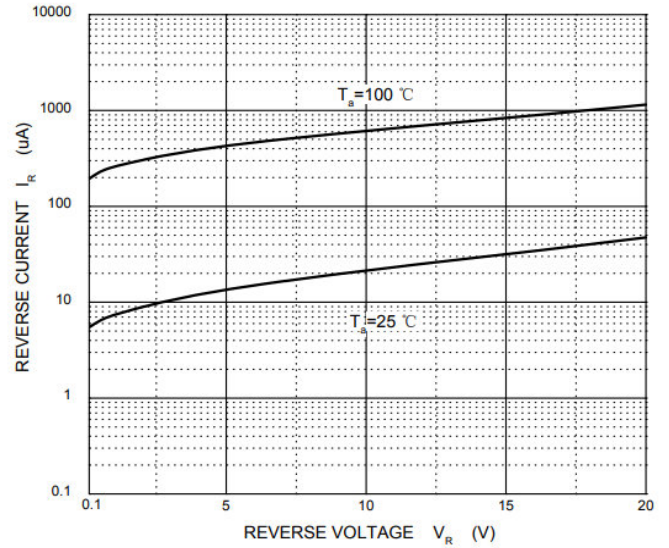
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	20	-	-	V	$I_R=250\mu\text{A}$
Reverse Current	$I_R$	-	-	50	$\mu\text{A}$	$V_R=10\text{V}$
Forward Voltage	$V_F$	-	-	0.18	V	$I_F=0.1\text{mA}$
		-	-	0.24		$I_F=1\text{mA}$
		-	-	0.29		$I_F=10\text{mA}$
		-	-	0.38		$I_F=100\text{mA}$
		-	-	0.6		$I_F=500\text{mA}$
Capacitance Between Terminals	$C_T$	-	30	-	pF	$V_R=1\text{V}, f=1\text{MHz}$

**RATINGS AND CHARACTERISTIC CURVES**

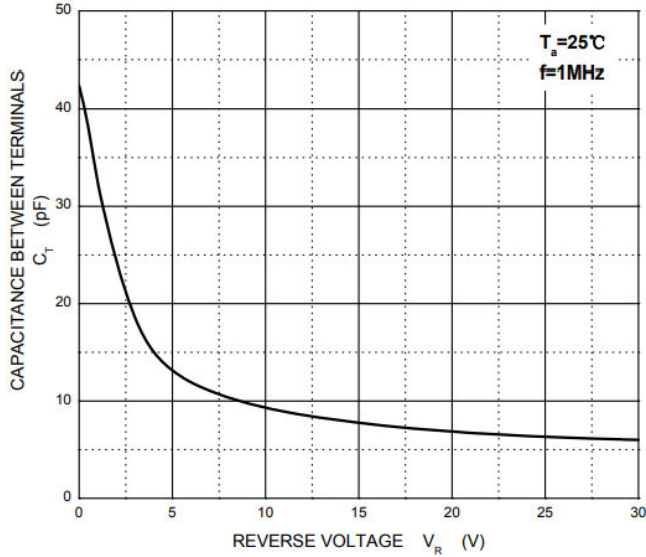
**Forward Characteristics**



**Reverse Characteristics**



**Capacitance Characteristics**



**Power Derating Curve**

