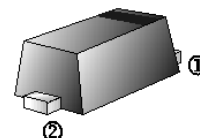


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Low Forward Voltage Drop
- Extremely Small SOD-523 Package
- Surface Device Type Mounting
- Band Indicates Cathode

**SOD-523**



## APPLICATION

- Low Voltage Rectification
- Reverse Polarity Protection
- Low Power Consumption Applications

## MARKING

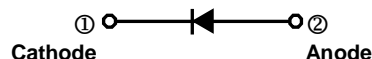
S4

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-523	3K	7 inch

## ORDER INFORMATION

Part Number	Type
SCS551S-40-C	Lead (Pb)-free and Halogen-free



## MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

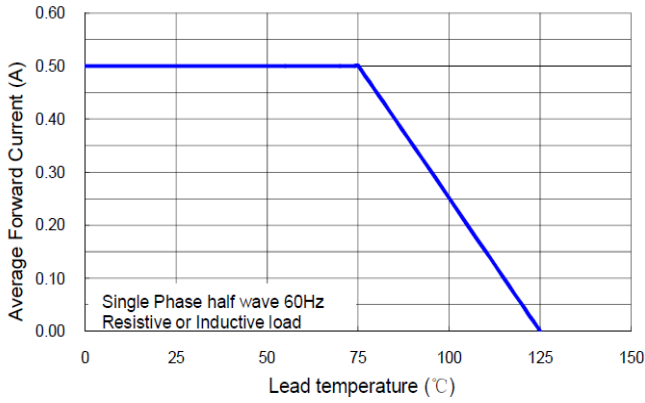
Parameter	Symbol	Ratings	Unit
Maximum Repetitive Reverse Voltage	V <sub>RRM</sub>	40	V
Maximum DC Blocking Reverse Voltage	V <sub>RWM</sub>	40	
Average Forward Current	I <sub>O</sub>	500	mA
Peak Forward Surge Current @t=8.3ms single half sine-wave	I <sub>FSM</sub>	5	A
Junction Temperature	T <sub>J</sub>	-55~125	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

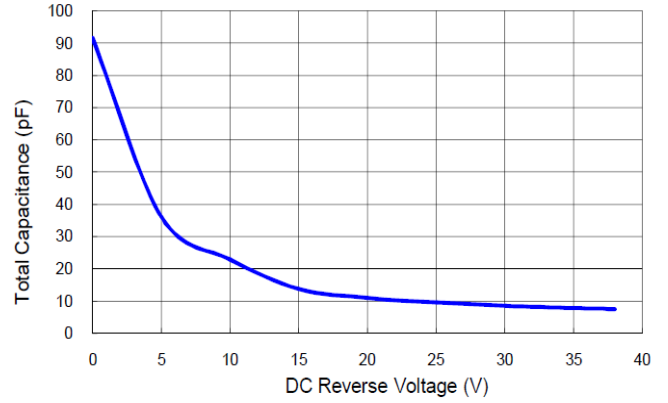
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Forward Voltage	V <sub>F</sub>	-	-	0.37	V	I <sub>F</sub> =100mA
		-	-	0.5		I <sub>F</sub> =500mA
Breakdown Voltage	V <sub>BR</sub>	40	-	-	V	I <sub>R</sub> =100μA
Reverse Leakage Current	I <sub>R</sub>	-	-	50	μA	V <sub>R</sub> =20V
		-	-	80		V <sub>R</sub> =40V
Junction Capacitance	C <sub>J</sub>	-	36	-	pF	V <sub>R</sub> =5V, f=1MHz

**RATINGS AND CHARACTERISTIC CURVES**

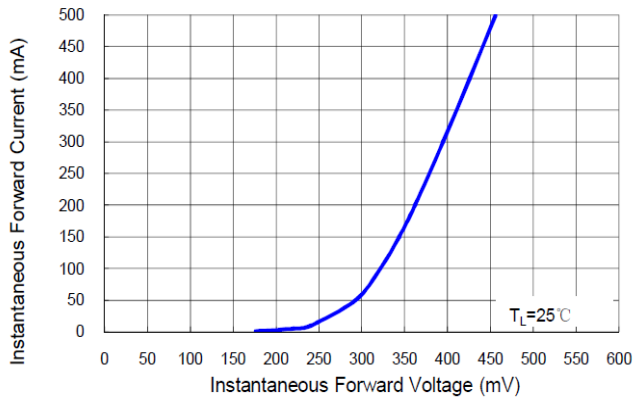
**Fig 1 Typical Forward Current Derating Curve**



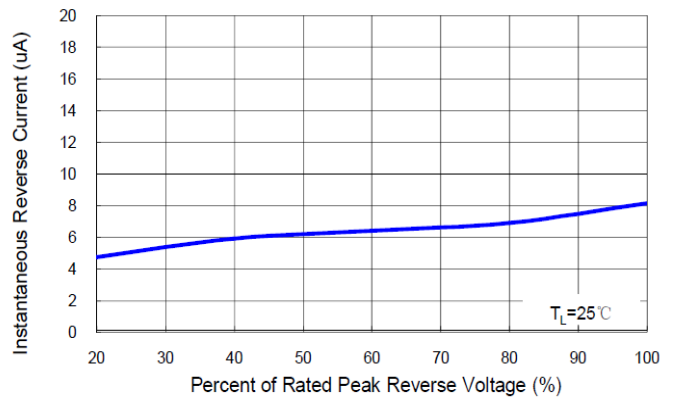
**Fig 2 Total Capacitance vs. Reverse Voltage**



**Fig 3 Typical Instantaneous Forward Characteristics**

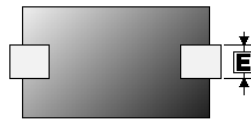
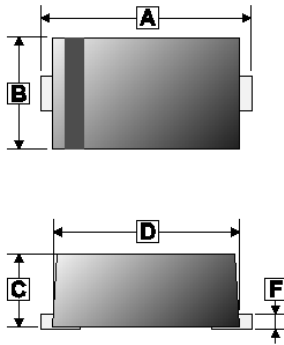


**Fig 4 Typical Reverse Characteristics**



**PACKAGE OUTLINE DIMENSIONS**

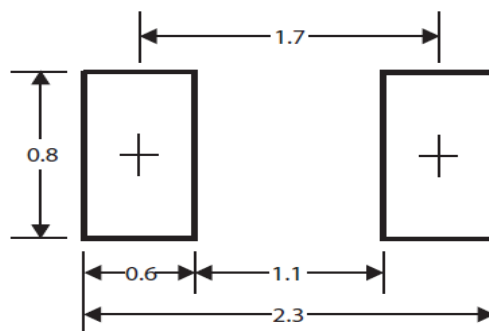
**SOD-523**



REF.	Millimeter	
	Min.	Max.
A	1.50	1.70
B	0.70	0.90
C	0.50	0.77
D	1.10	1.30
E	0.25	0.40
F	0.05	0.20

**MOUNTING PAD LAYOUT**

**SOD-523**



\*Dimensions in millimeters