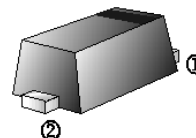


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Small Surface Mounting Type
- Matte Tin (Sn) Lead finish
- Low Reverse Current
- Low Forward Voltage

SOD-523



## MECHANICAL DATA

- Case: SOD-523, Molded Plastic
- Lead: Lead Solderable per MIL-STD-202, Method 208 Guaranteed
- Mounting position: Any

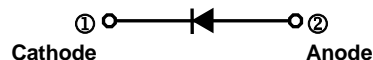
## MARKING

5

4B

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-523	8K	7 inch



## ORDER INFORMATION

Part Number	Type
SCS751S-C	Lead (Pb)-free and Halogen-free

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Rating	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
DC Blocking Voltage	$V_R$	30	V
Continuous Forward Current	$I_o$	30	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	0.2	A
Power Dissipation	$P_D$	200	W
Operating Temperature Range	$T_J$	125	°C
Storage Temperature Range	$T_{STG}$	-55~125	

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Forward Voltage	$V_F$	-	-	0.37	V	$I_F=1mA$
Peak Reverse Current	$I_R$	-	-	0.5	μA	$V_R=30V$
Diode Capacitance	$C_J$	-	2	-	pF	$V_R=1V, f=1MHz$

**RATINGS AND CHARACTERISTIC CURVES**

Fig. 1 - Forward Characteristics

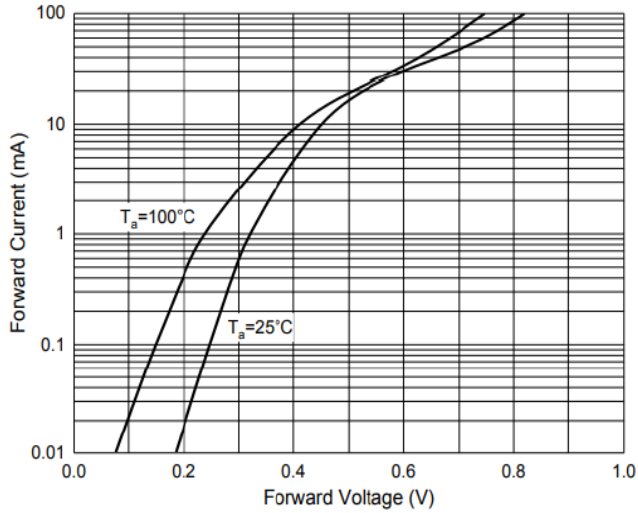


Fig. 2 - Reverse Characteristics

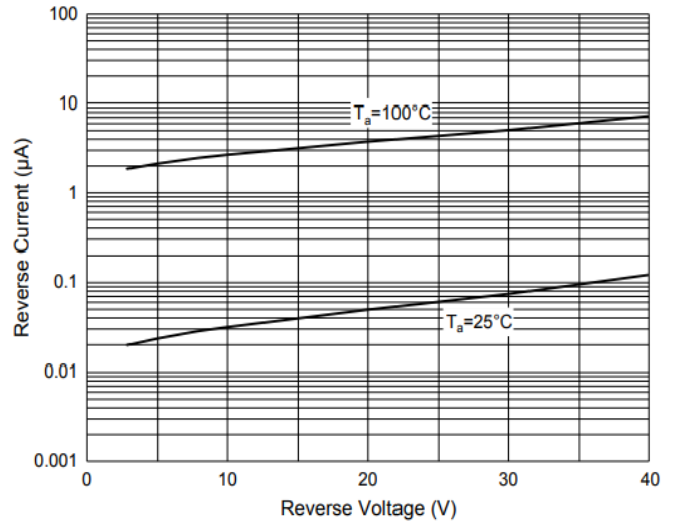


Fig. 3 - Capacitance Characteristics

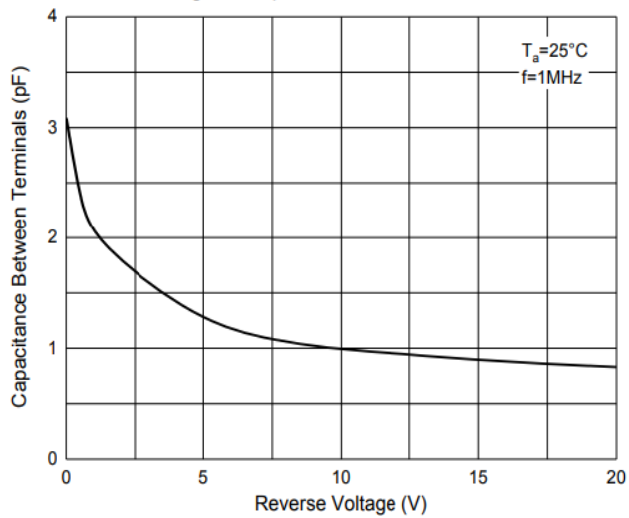
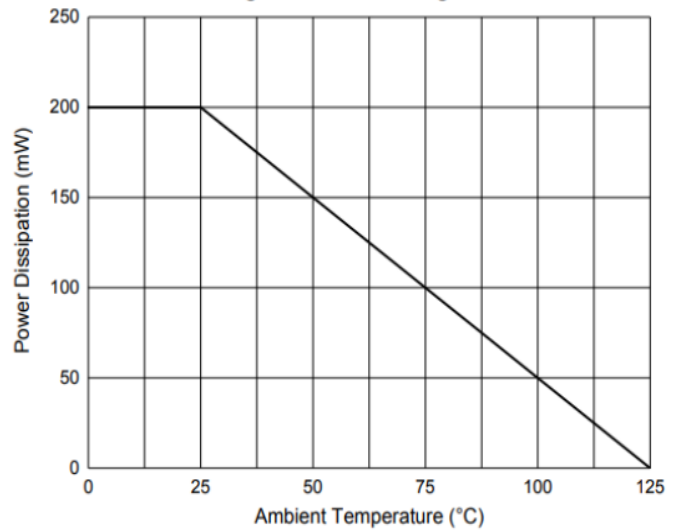
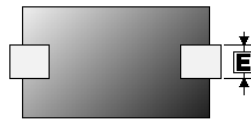
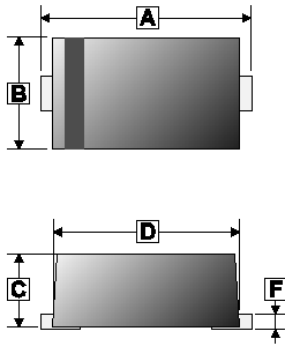


Fig. 4 - Power Derating Curve



**PACKAGE OUTLINE DIMENSIONS**

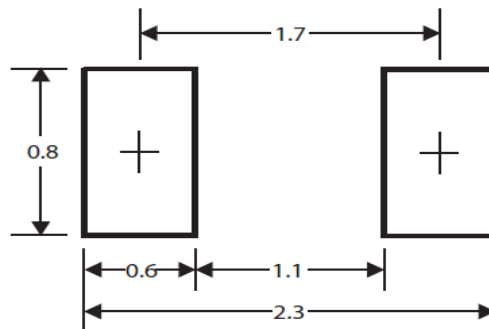
**SOD-523**



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