

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

## FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering: 250°C for 10 Seconds at Terminals
- Low Forward Voltage

## MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Solderable Per MIL-STD-202, Method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

## MARKING

BB

SJ

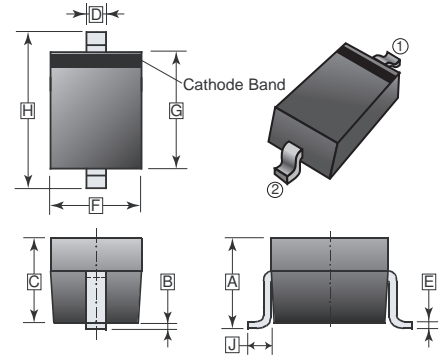
## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123	3K	7 inch

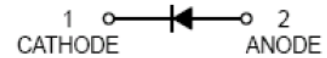
## ORDER INFORMATION

Part Number	Type
SCS0520P-C	Lead (Pb)-free and Halogen-free

## SOD-123



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.94	1.35	F	1.40	1.80
B	0.10 REF.		G	2.54	2.85
C	1.00	1.30	H	3.55	3.86
D	0.30	0.78	J	0.50 REF.	
E	0.08	0.25			



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

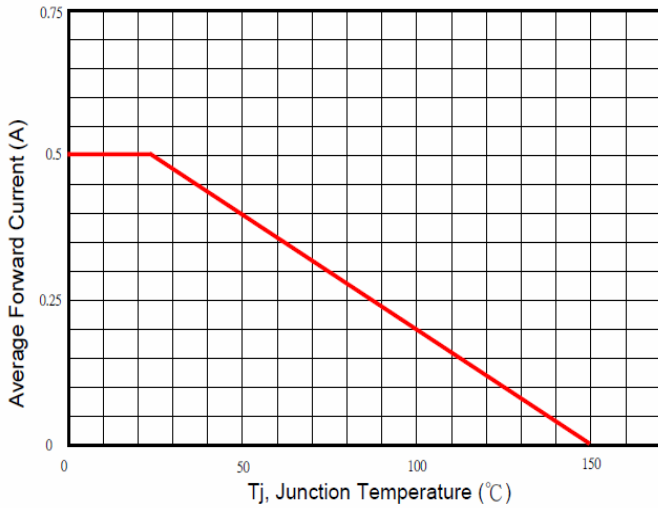
Parameter	Symbol	Ratings	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	20	V
Maximum DC Blocking Voltage	V <sub>R</sub>	20	V
Average Forward Current	I <sub>F(AV)</sub>	0.5	A
Peak Forward Current @8.3ms Half Sine	I <sub>FSM</sub>	10	A
Maximum Instantaneous Forward Voltage @I <sub>FM</sub> =0.5A	V <sub>F</sub>	T <sub>A</sub> =25°C	0.45
		T <sub>A</sub> =125°C	0.35
Maximum DC Reverse Current @Rated DC Blocking Voltage	I <sub>R</sub>	T <sub>J</sub> =25°C	1
		T <sub>J</sub> =100°C	10
Typical Junction Capacitance <sup>1</sup>	C <sub>J</sub>	170	pF
Typical Thermal Resistance from Junction-Ambient <sup>2</sup>	R <sub>θJA</sub>	310	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55~150	°C

Notes:

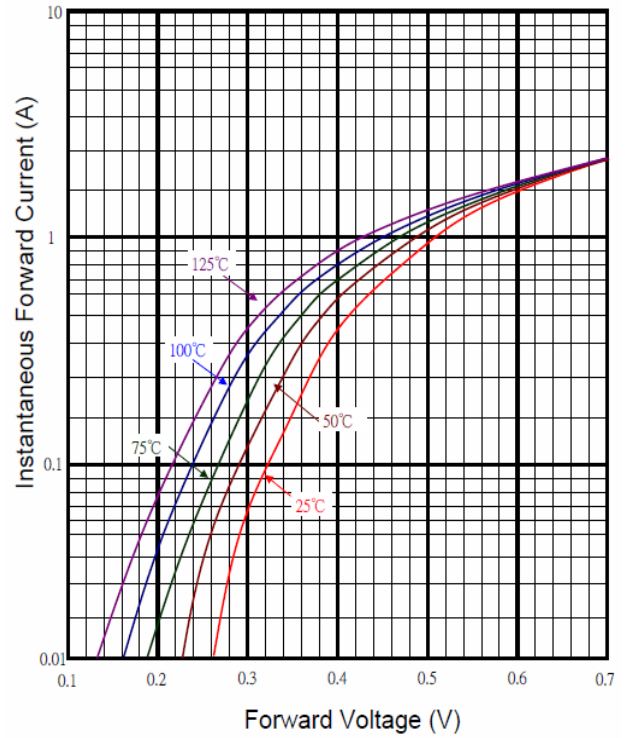
1. Measured at 1MHz and applied reverse of 0V D.C.
2. FR-4 PCB, 2oz. 0.65mmx1.35mm copper pad.

**RATINGS AND CHARACTERISTIC CURVES**

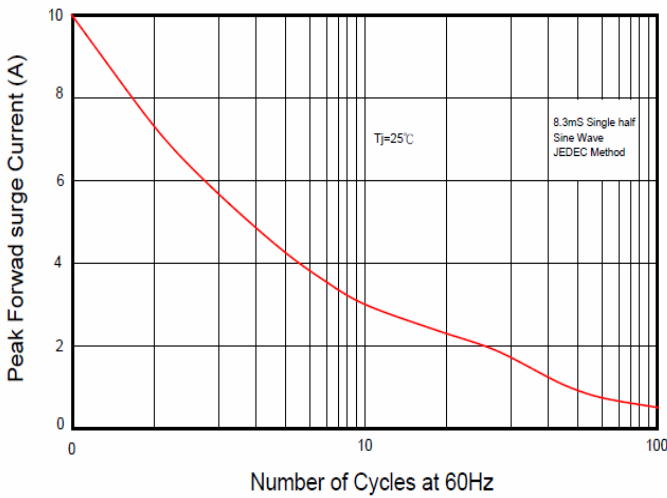
Typical Forward Current Derating Curve



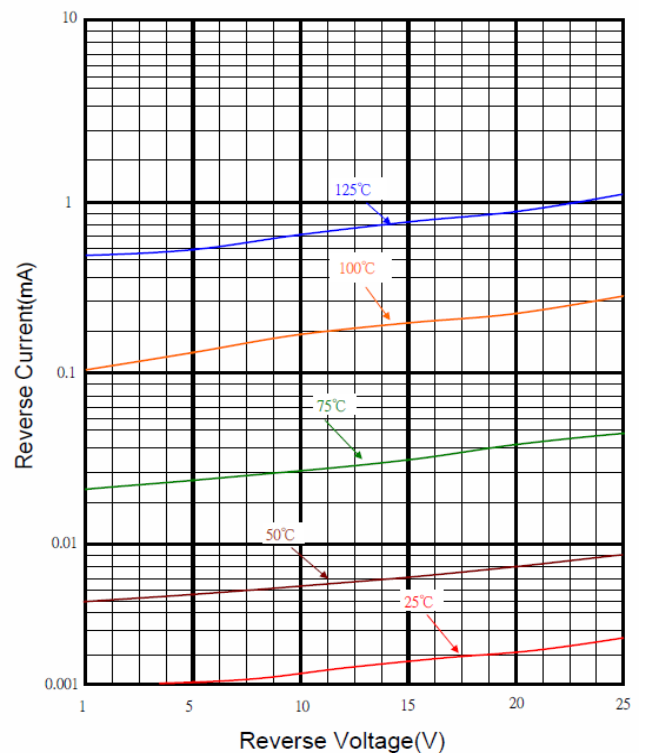
Typical Forward Characteristic



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

