

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

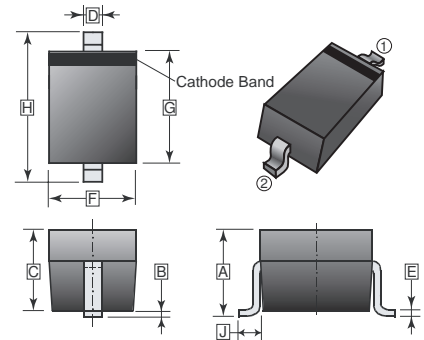
#### FEATURES

- 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

#### SOD-123



#### MARKING

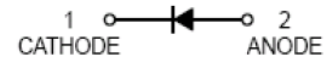
BM

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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			

#### PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123	3K	7 inch



#### ORDER INFORMATION

Part Number	Type
SCS140P-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%.)

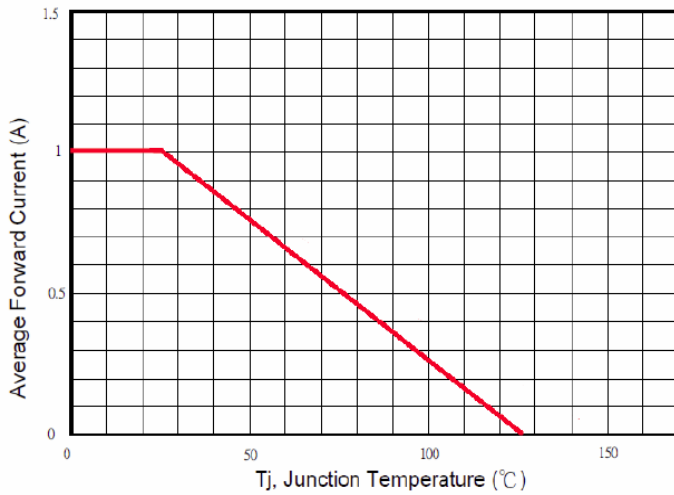
Parameter		Symbol	Ratings	Unit
Maximum Recurrent Peak Reverse Voltage		$V_{RRM}$	40	V
Working Peak Reverse Voltage		$V_{RWM}$	40	V
Maximum DC Blocking Voltage		$V_R$	40	V
Average Forward Current	$T_J=25^\circ\text{C}$	$I_{F(AV)}$	1	A
Peak Forward Current @8.3ms Half Sine		$I_{FSM}$	10	A
Maximum Instantaneous Forward Voltage @ $I_{FM}=1\text{A}$	$T_A=25^\circ\text{C}$	$V_F$	0.52	V
	$T_A=125^\circ\text{C}$		0.45	
Maximum DC Reverse Current @ Rated DC Blocking Voltage	$T_J=25^\circ\text{C}$	$I_R$	0.1	mA
	$T_J=100^\circ\text{C}$		10	
Typical Junction Capacitance <sup>1</sup>		$C_J$	160	pF
Typical Thermal Resistance from Junction-Ambient <sup>2</sup>		$R_{\theta JA}$	310	°C/W
Operating and Storage Temperature Range		$T_J, T_{STG}$	125, -55~150	°C

Notes:

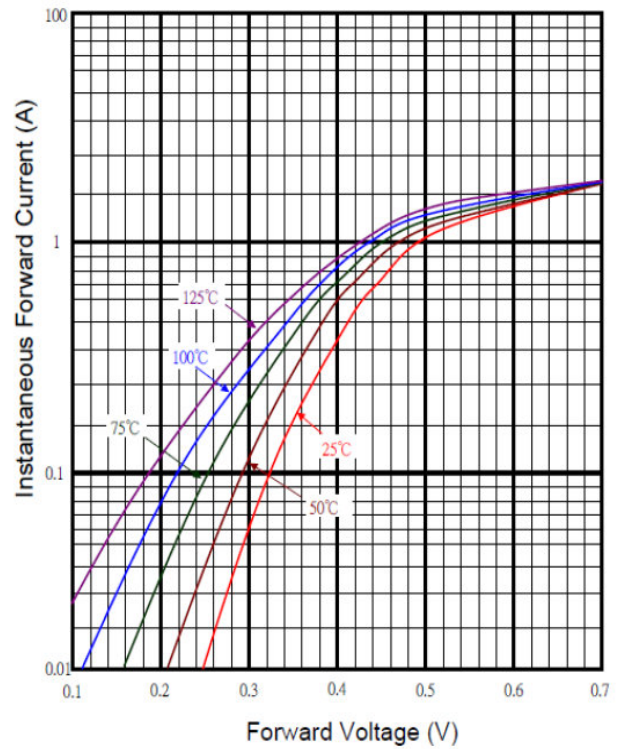
1. Measured at 1MHz and applied reverse of 0V D.C.
2. FR-4 PCB, 2oz. 0.7mmx1.2mm copper pad.

**RATINGS AND CHARACTERISTIC CURVES**

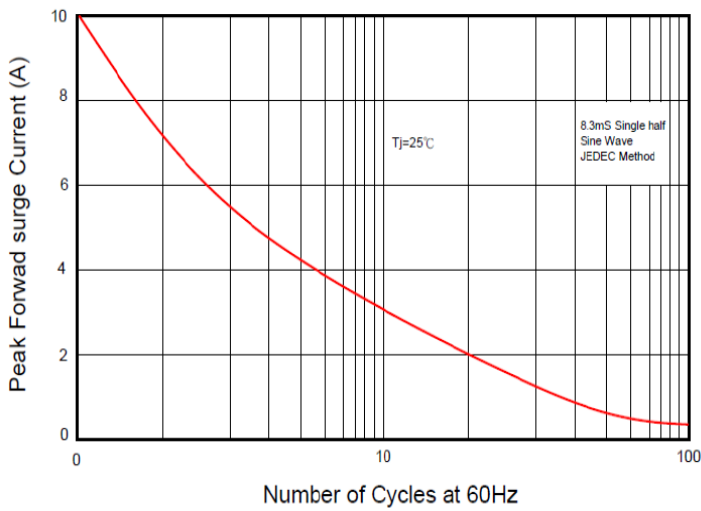
Typical Forward Current Derating Curve



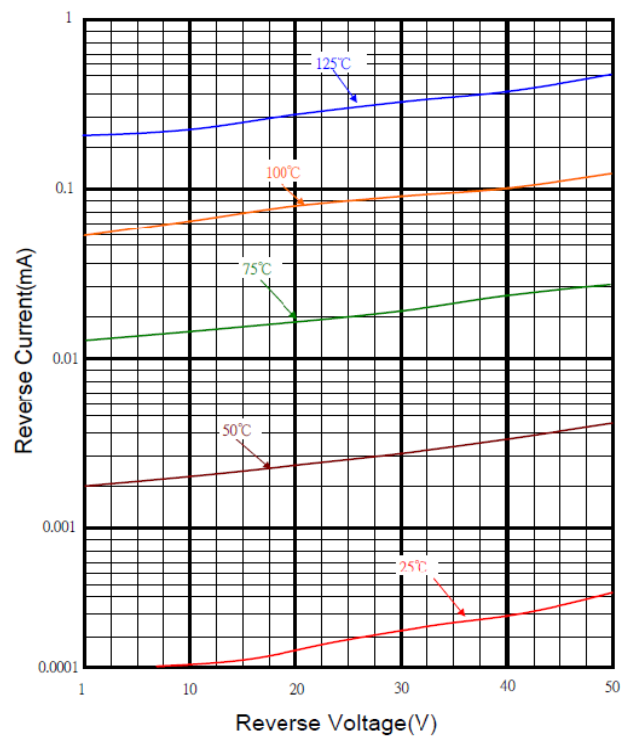
Typical Forward Characteristic



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

