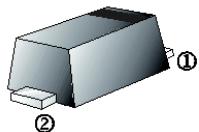


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Low Forward Voltage

**SOD-123FL**



## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123FL	3K	7 inch

## ORDER INFORMATION

Part Number	Type
SK240LFL-C	Lead (Pb)-free and Halogen-free



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

Parameter	Symbol	Rating	Unit
Maximum Recurrent Reverse Voltage	V <sub>RRM</sub>	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	V
Maximum Average Forward Rectified Current T <sub>J</sub> =25°C	I <sub>F</sub>	2	A
Peak Forward Surge Current @8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	40	A
Typical Junction Capacitance <sup>2</sup>	C <sub>J</sub>	250	pF
Typical Thermal Resistance from Junction-Ambient <sup>1</sup>	R <sub>θJA</sub>	80	°C/W
Typical Thermal Resistance from Junction-Lead <sup>1</sup>	R <sub>θJL</sub>	25	
Operating Junction & Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	125, -55~150	°C

Notes:

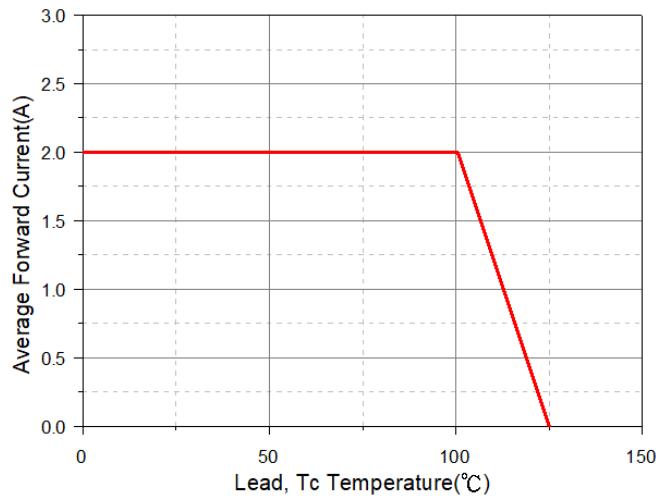
1. FR-4 PCB, 2oz. 0.7mm x1.2mm copper pad.
2. f=1MHz, V<sub>R</sub>=4V

## ELECTRICAL CHARACTERISTICS

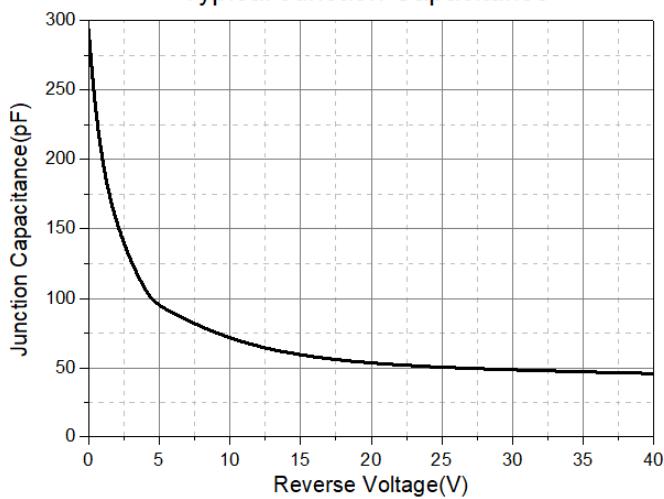
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Forward Voltage Drop	V <sub>FM</sub>	0.45	0.49	V	I <sub>F</sub> =2A, T <sub>J</sub> =25°C
		0.4	-		I <sub>F</sub> =2A, T <sub>J</sub> =125°C
Peak Reverse Current @Rated DC Blocking Voltage	I <sub>R</sub>	-	0.1	mA	T <sub>J</sub> =25°C
		-	10		T <sub>J</sub> =100°C

## CHARACTERISTIC CURVES

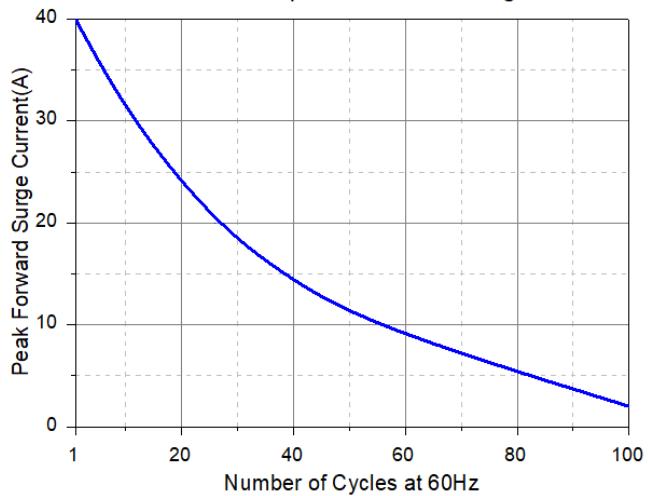
Typical Forward Current Derating Curve



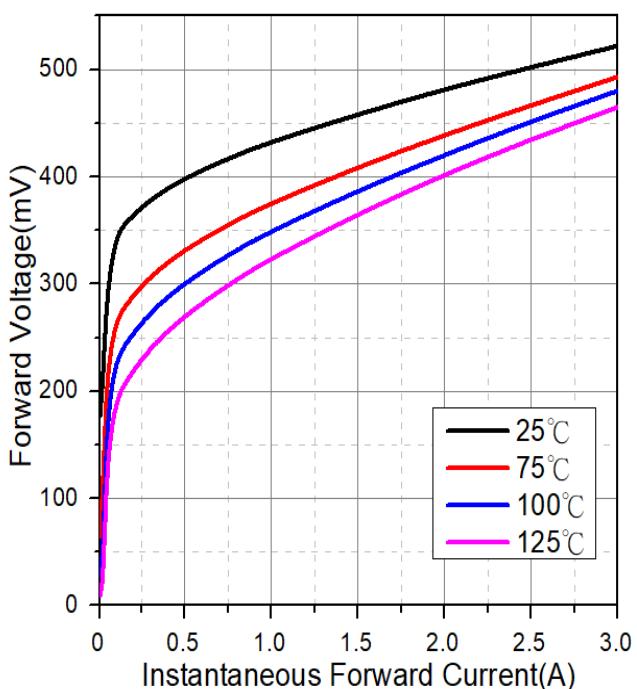
Typical Junction Capacitance



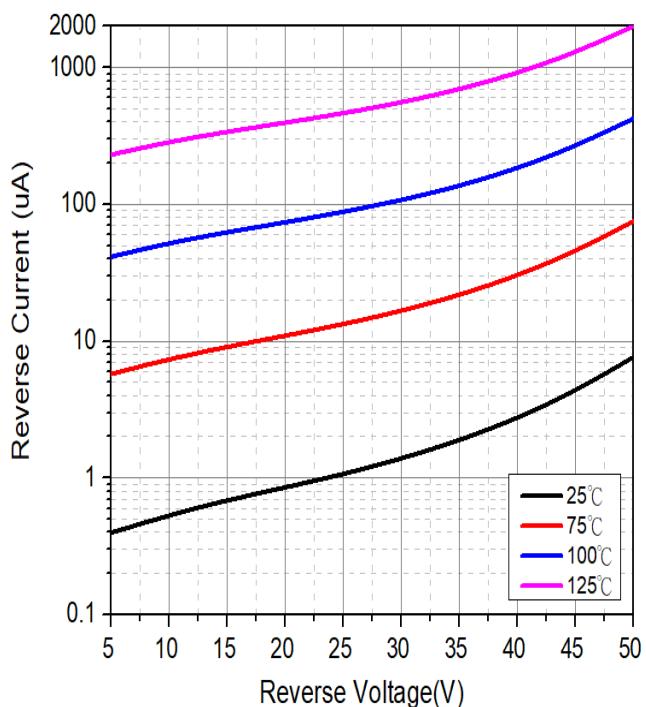
Maximum Non-Repetitive Forward Surge Current



Typical Forward Characteristic

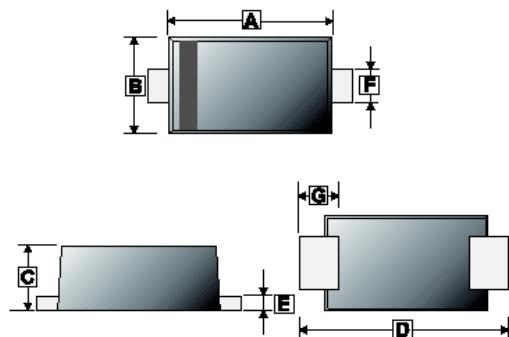


Typical Reverse Characteristic



## PACKAGE OUTLINE DIMENSIONS

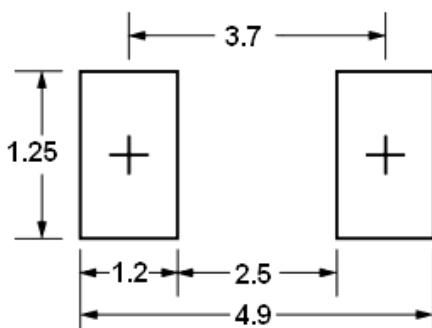
SOD-123FL



REF.	Millimeter	
	Min.	Max.
A	2.40	3.10
B	1.40	2.10
C	0.80	1.55
D	3.30	3.95
E	0.05	0.30
F	0.50	1.35
G	0.80 TYP.	

## MOUNTING PAD LAYOUT

SOD-123FL



\*Dimensions in millimeters