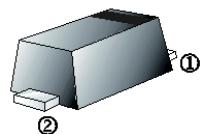


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

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
SK140LFL-C	Lead (Pb)-free and Halogen-free



ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Maximum Recurrent Reverse Voltage	V_{RRM}	40	V
Maximum RMS Voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current $T_J=25^\circ\text{C}$	I_F	1	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	40	A
Typical Junction Capacitance ²	C_J	250	pF
Typical Thermal Resistance from Junction-Ambient ¹	$R_{\theta JA}$	80	$^\circ\text{C}/\text{W}$
Typical Thermal Resistance from Junction-Lead ¹	$R_{\theta JL}$	25	
Operating Junction & Storage Temperature Range	T_J, T_{STG}	125, -55~150	$^\circ\text{C}$

Notes:

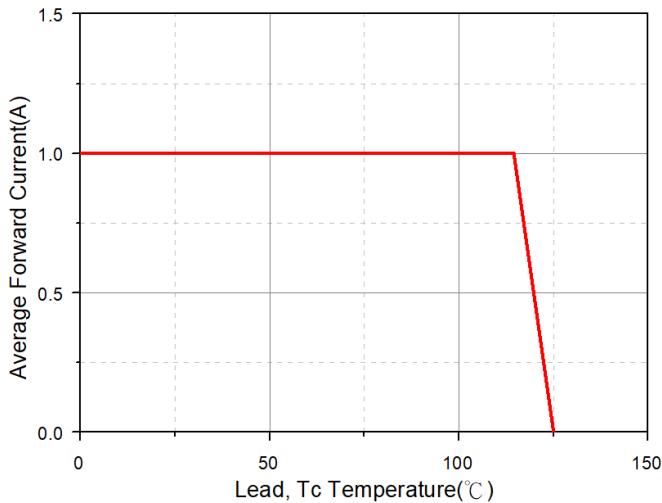
1. FR-4 PCB, 2oz. 0.7mm x 1.2mm copper pad.
2. Measured at 1MHz and applied reverse of 4V DC.

ELECTRICAL CHARACTERISTICS

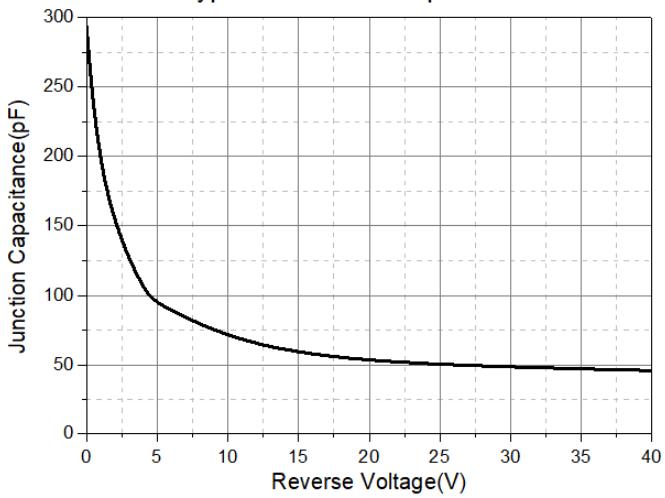
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Forward Voltage Drop	V_F	0.39	0.42	V	$I_F=1\text{A}, T_J=25^\circ\text{C}$
		0.3	-		$I_F=1\text{A}, T_J=125^\circ\text{C}$
Peak Reverse Current @Rated DC Blocking Voltage	I_R	-	0.1	mA	$T_J=25^\circ\text{C}$
		-	10		$T_J=100^\circ\text{C}$

CHARACTERISTIC CURVES

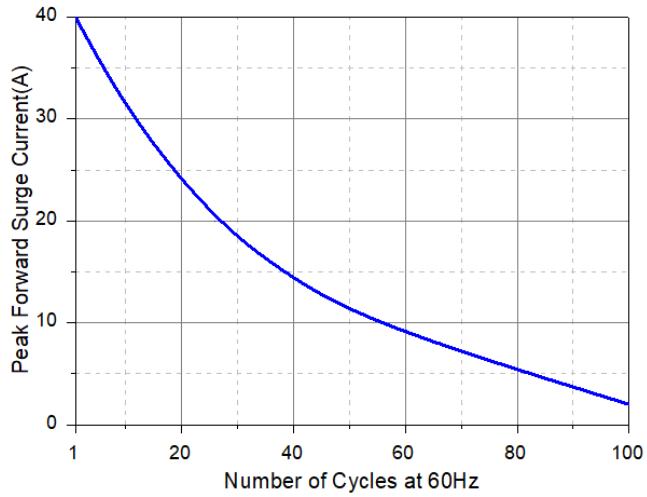
Typical Forward Current Derating Curve



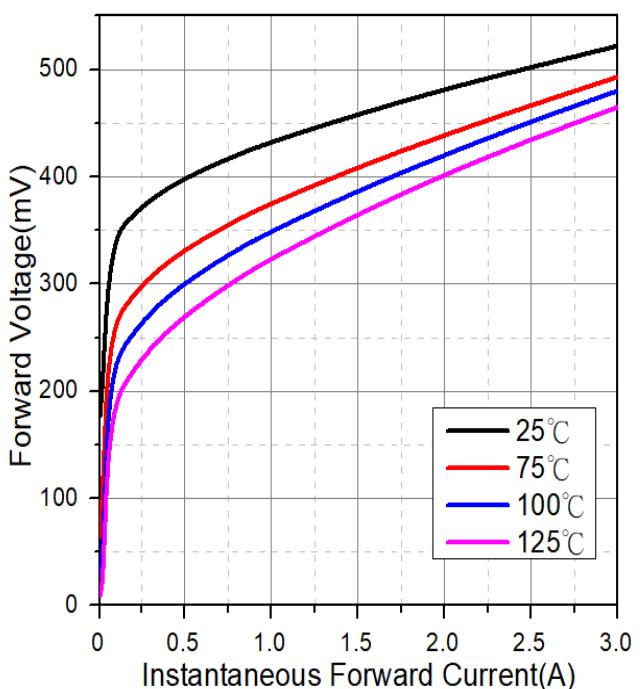
Typical Junction Capacitance



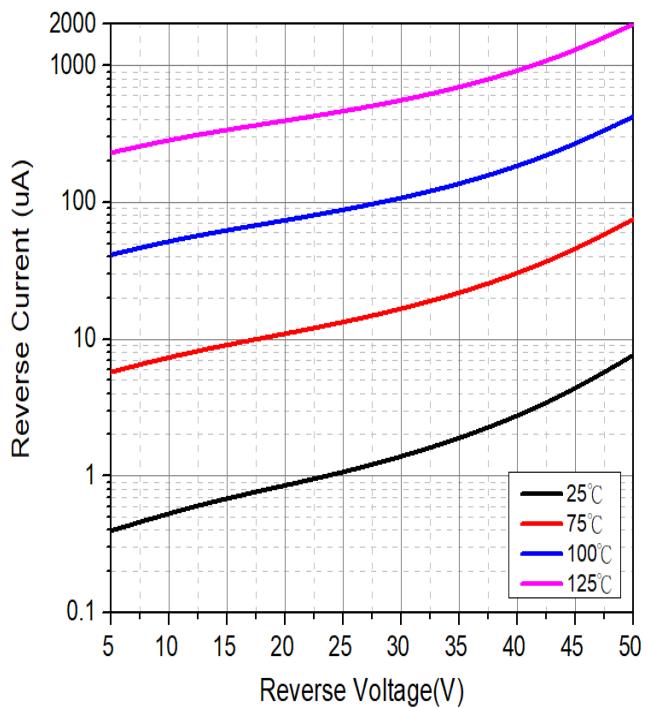
Maximum Non-Repetitive Forward Surge Current



Typical Forward Characteristic

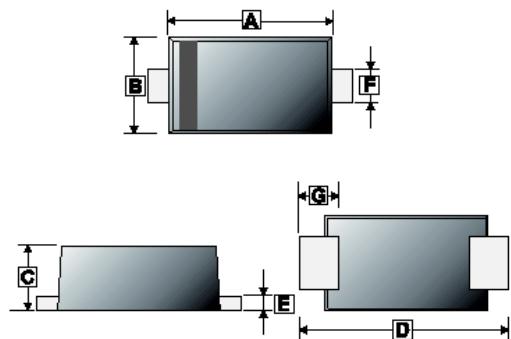


Typical Reverse Characteristic



PACKAGE OUTLINE DIMENSIONS

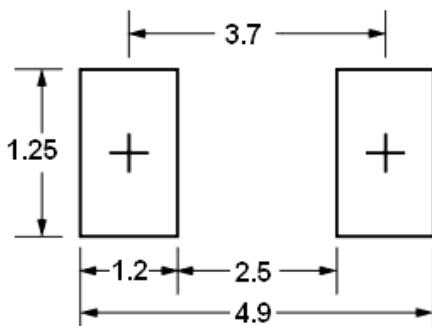
SOD-123FL



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