

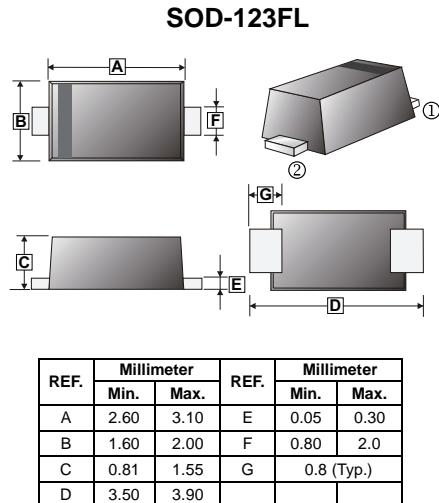
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

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

## PACKAGE INFORMATION

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



## 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@ $f=1\text{MHz}$ , $V_R=4\text{V}$	$C_J$	250	pF
Typical Thermal Resistance from Junction to Ambient <sup>1</sup>	$R_{\theta JA}$	80	$^\circ\text{C}/\text{W}$
Typical Thermal Resistance from Junction to Lead <sup>1</sup>	$R_{\theta JL}$	25	$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	125, -55~150	$^\circ\text{C}$

Notes :

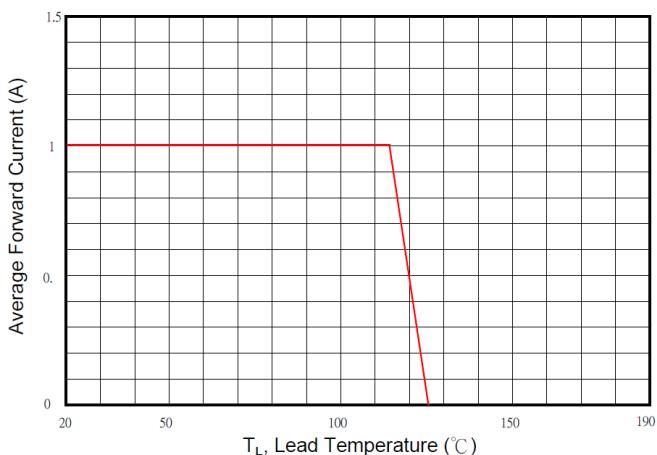
- FR-4 PCB, 2oz. 0.7 mm × 1.2 mm copper pad.

## ELECTRICAL CHARACTERISTICS

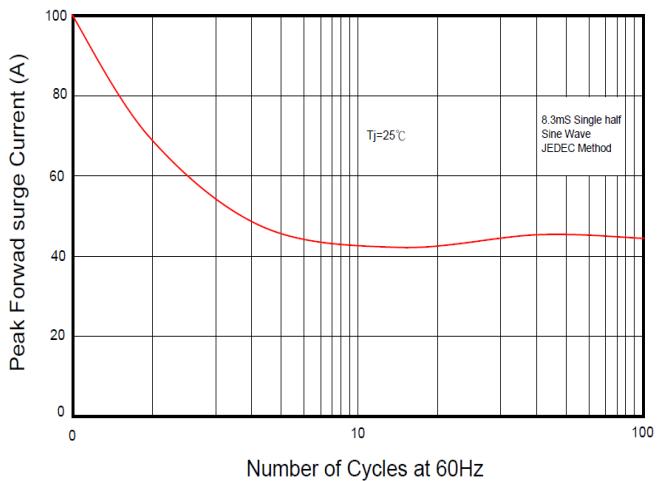
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Forward Voltage Drop	$V_{FM}$	0.39	0.42	V	$I_F=1\text{A}, T_J=25^\circ\text{C}$
		0.3	-		$I_F=1\text{A}, T_J=125^\circ\text{C}$
Peak Reverse Current at Rated DC Blocking Voltage	$I_R$	-	0.1	mA	$T_J=25^\circ\text{C}$
		-	10		$T_J=100^\circ\text{C}$

## CHARACTERISTIC CURVES

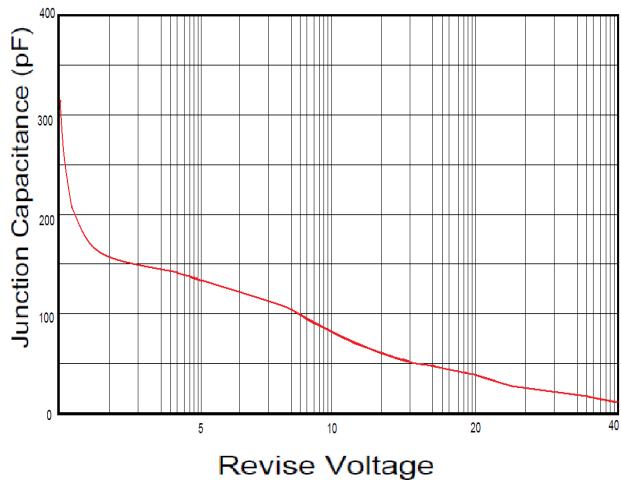
Typical Forward Current Derating Curve



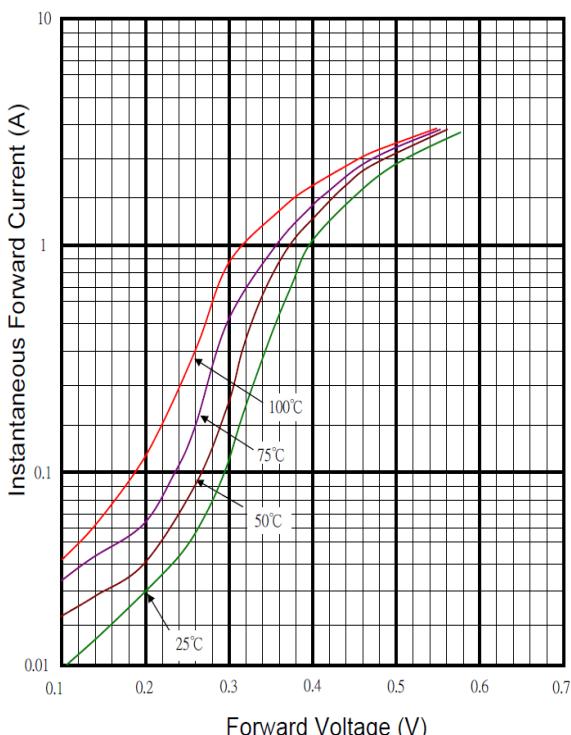
Maximum Non-Repetitive Forward Surge Current



Typical Junction Capacitance



Typical Forward Characteristic



Typical Reverse Characteristic

