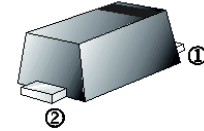


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Glass passivated device
- Ideal for surface mounted applications
- Low forward voltage drop
- Very low profile - typical height of 1.0 mm
- High temperature soldering: 260°C /10 seconds at terminals

SOD-123FL

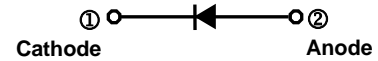


MARKING

Product	Marking Code	Product	Marking Code
SUF11FL-C	EA / E1 / U1	SUF16FL-C	EG / E6 / U4
SUF12FL-C	EB / E2 / U2	SUF18FL-C	EJ / E8 / U5
SUF14FL-C	EC / E4 / U3	-	-

PACKAGE INFORMATION

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



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%.)

Parameters	Symbol	Part Number					Unit
		SUF11FL-C	SUF12FL-C	SUF14FL-C	SUF16FL-C	SUF18FL-C	
Maximum Recurrent Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Instantaneous Forward Voltage @ $I_F=1A$	V_F	0.95			1.3	1.7	V
Maximum Average Forward Rectified Current @ $T_L=100^\circ C$	$I_{F(AV)}$	1					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30					A
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_J=25^\circ C$	5					μA
	$T_J=125^\circ C$	100					
Maximum Reverse Recovery Time ¹	T_{RR}	35					ns
Typical Junction Capacitance ²	C_J	20			7		pF
Typical thermal resistance	$R_{\theta JA}$	120					$^\circ C/W$
	$R_{\theta JC}$	12					
	$R_{\theta JL}$	17					
Operation and Storage Temperature Range	T_J, T_{STG}	-55~150					$^\circ C$

Notes:

1. Measured with $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$.
2. Measured at 1MHz and applied reverse voltage of 4 V D.C.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

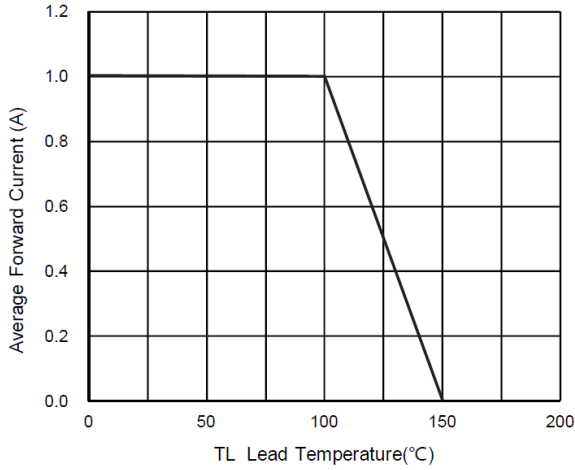


Fig.2 Typical Forward Characteristics

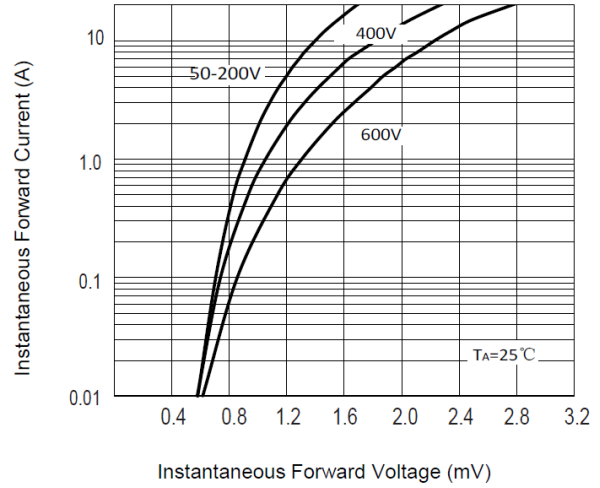


Fig.3 Forward Surge Current Capability

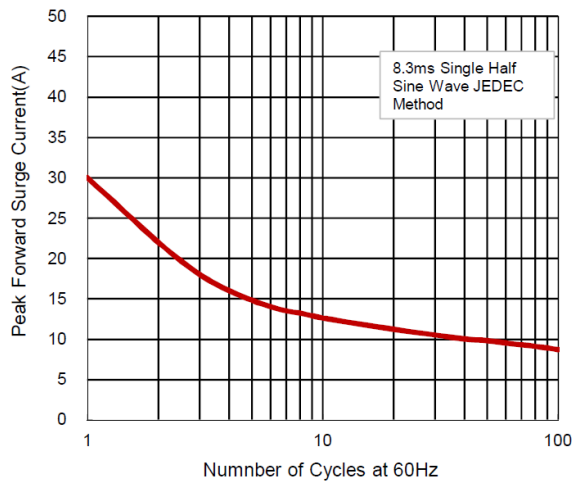
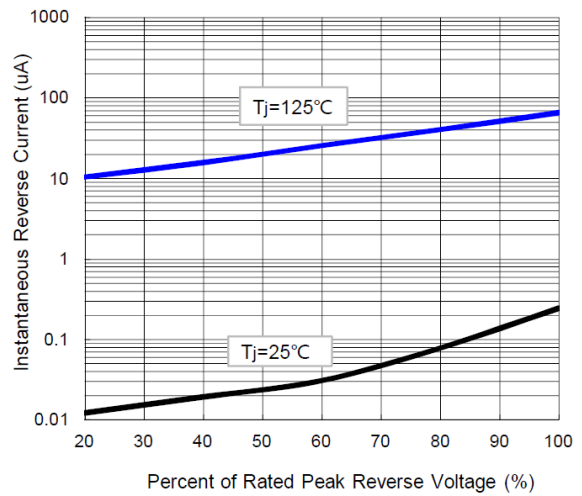
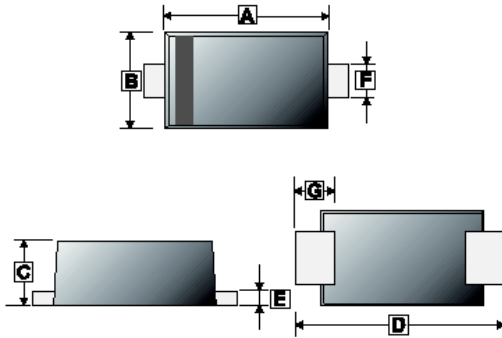


Fig.4 Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSIONS

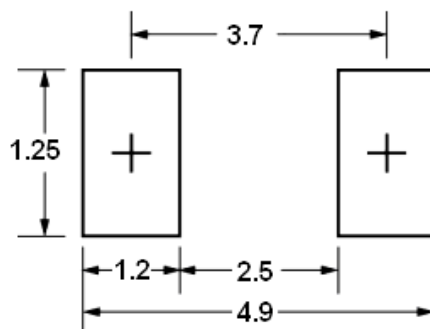
SOD-123FL



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