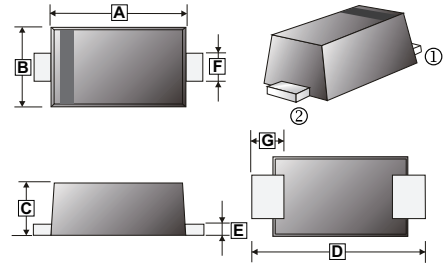


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

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

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.60	3.10	E	0.05	0.30
B	1.60	2.00	F	0.80	2.0
C	0.81	1.55	G	0.8 (Typ.)	
D	3.50	3.90			

ABSOLUTE MAXIMUM RATINGS (T_A=25°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°C	I _F	2	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=1MHz, V _R =4V	C _J	250	pF
Typical Thermal Resistance from Junction to Ambient ¹	R _{θJA}	80	°C/ W
Typical Thermal Resistance from Junction to Lead ¹	R _{θJL}	25	°C/ W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	125, -55~150	°C

Notes :

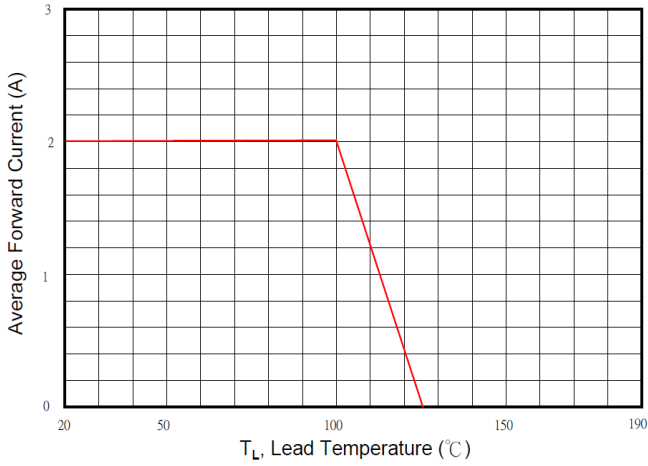
1. FR-4 PCB, 2oz. 0.7 mm x1.2 mm copper pad.

ELECTRICAL CHARACTERISTICS

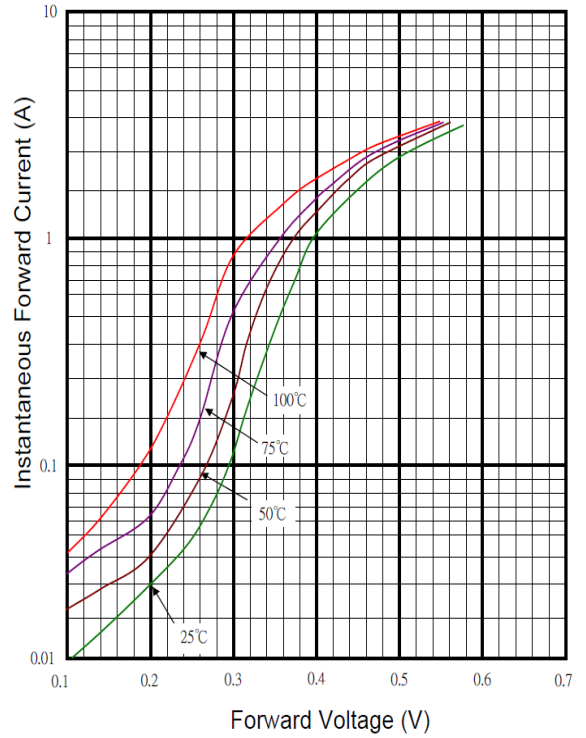
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Forward Voltage Drop	V _{FM}	0.45	0.49	V	I _F =2A, T _J =25°C
		0.4	-		I _F =2A, T _J =125°C
Peak Reverse Current at Rated DC Blocking Voltage	I _R	-	0.1	mA	T _J =25°C
		-	10		T _J =100°C

CHARACTERISTIC CURVES

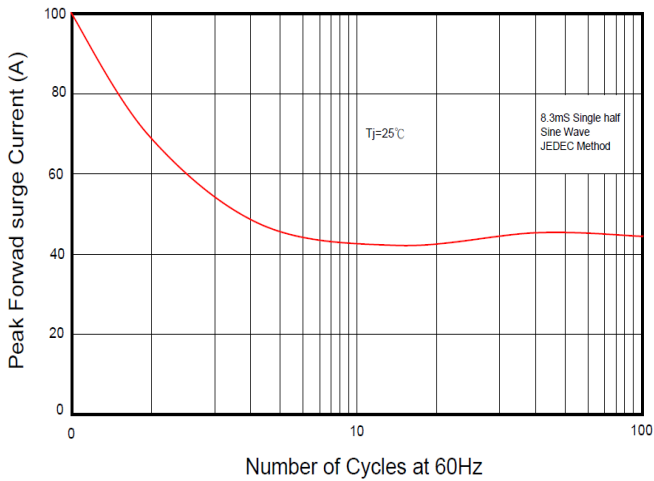
Typical Forward Current Derating Curve



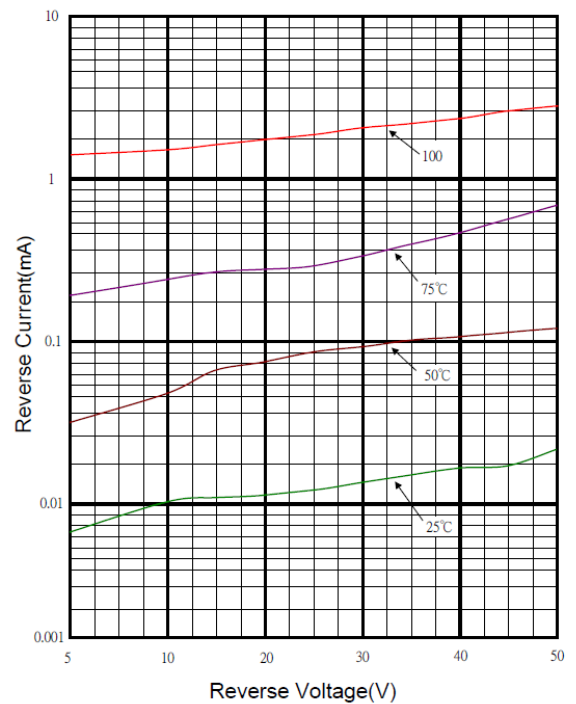
Typical Forward Characteristic



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

