

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

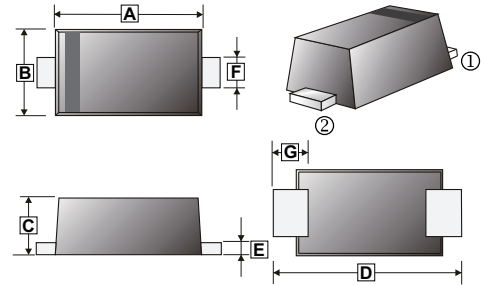
MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color Band Denotes Cathode End

MARKING



SOD-123FL



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	2.90	E	0.10	0.30
B	1.70	2.00	F	0.80	1.35
C	0.81	1.55	G	0.35	0.85
D	3.50	3.90			

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}	60	V
Maximum DC Blocking Voltage	V_{DC}	60	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
Maximum Instantaneous Forward Voltage @ $I_F=1\text{A}$	V_F	0.55	V
Maximum DC Reverse Current @ $V_R=60\text{V}$, $T_J=25^{\circ}\text{C}$	I_R	50	μA
Typical Junction Capacitance ¹	C_J	60	pF
Typical Thermal Resistance	$R_{\theta JL}$	20	$^{\circ}\text{C} / \text{W}$
Typical Thermal Resistance ²	$R_{\theta JA}$	310	$^{\circ}\text{C} / \text{W}$
Operating Temperature Range	T_J	-50~125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-50~150	$^{\circ}\text{C}$

Notes :

1. Measured @ $f=1.0\text{MHz}$, $V_R=10\text{V}$
2. FR-4 PCB, 2oz. 0.7mmx1.2mm copper pad.

CHARACTERISTIC CURVES

FIG.1 – FORWARD DERATING CURVE

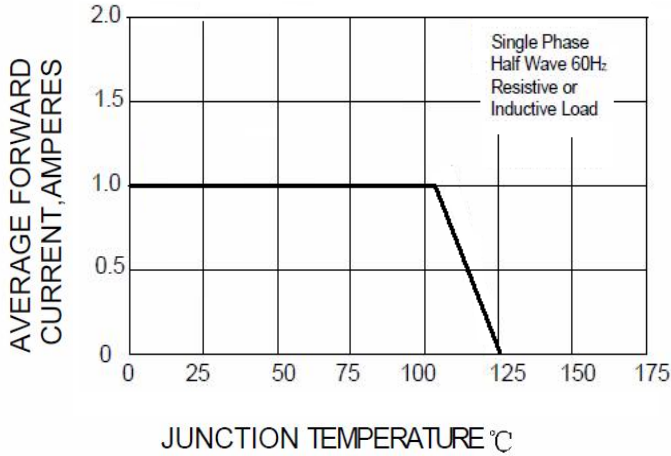


FIG.2- PEAK FORWARD SURGE CURRENT

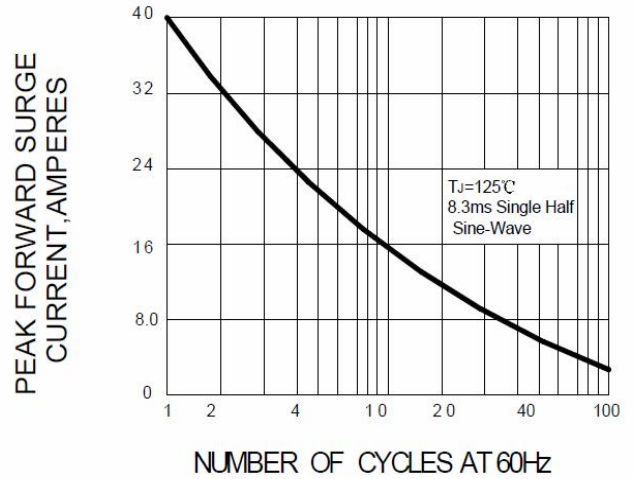


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

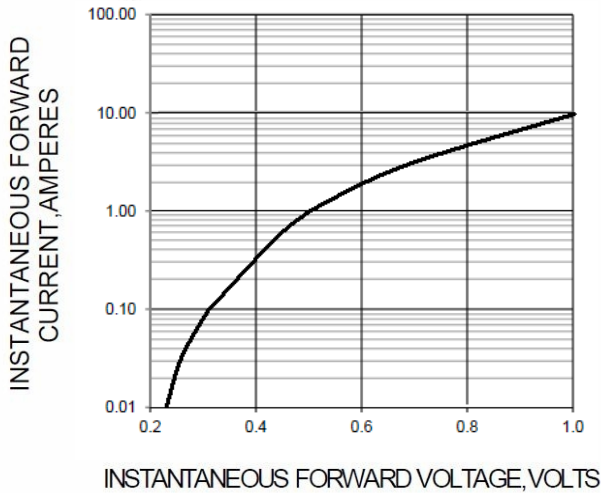


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

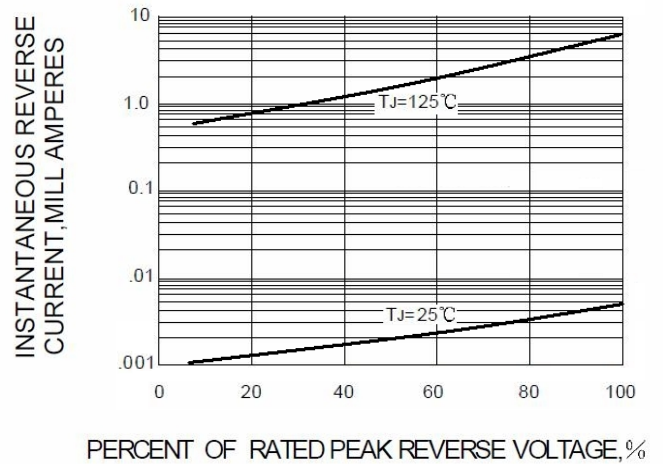


FIG.5-TYPICAL JUNCTION CAPACITANCE

