

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

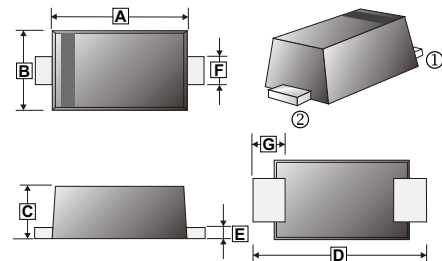
MARKING



PACKAGE INFORMATION

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

SOD-123FL



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.60	3.10	E	0.10	0.30
B	1.60	2.00	F	0.80	1.35
C	0.81	1.55	G	0.35	0.85
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}	60	V
Maximum DC Blocking Voltage	V _{DC}	60	V
Maximum Average Forward Rectified Current @ T _J =25°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 =1A	V _F	0.55	V
Maximum DC Reverse Current @V _R =60V, T _J =25°C	I _R	50	μA
Typical Junction Capacitance ¹	C _J	60	pF
Typical Thermal Resistance	R _{θJL}	20	°C / W
Typical Thermal Resistance ²	R _{θJA}	310	°C / W
Operating Temperature Range	T _J	-50~125	°C
Storage Temperature Range	T _{STG}	-50~150	°C

Notes :

1. Measured @ f=1.0MHz, V_R=10V
2. FR-4 PCB, 2oz. 0.7mm×1.2mm copper pad.

CHARACTERISTIC CURVES

FIG.1 – FORWARD DERATING CURVE

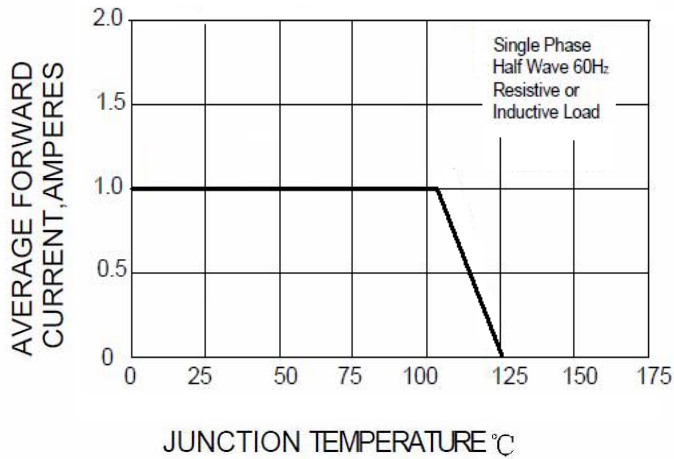


FIG.2– PEAK FORWARD SURGE CURRENT

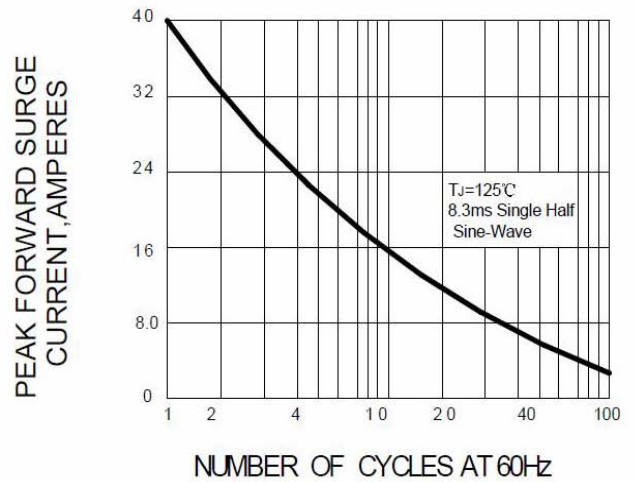


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

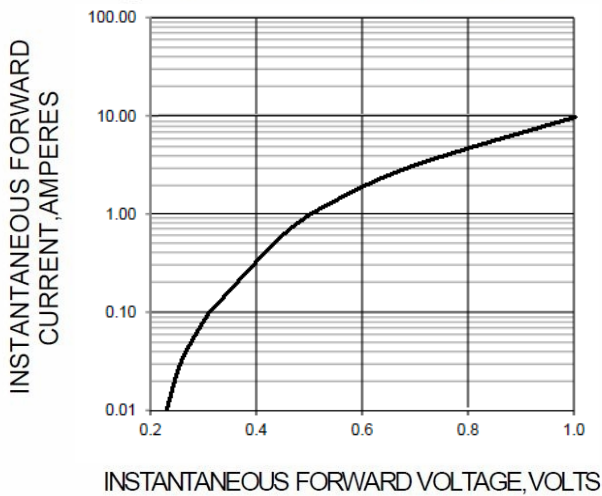


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

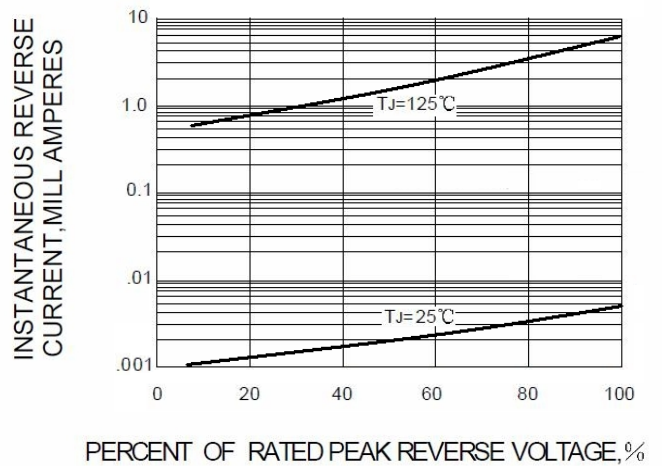


FIG.5–TYPICAL JUNCTION CAPACITANCE

