

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

FEATURES

- Low forward surge current
- Ideal for surface mounted applications
- Low leakage current

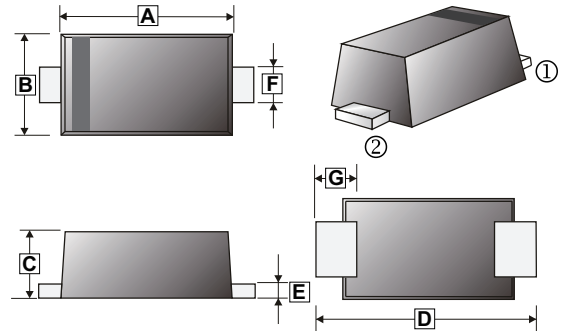
MECHANICAL DATA

- Case: JEDEC SOD-123FL, molded plastic over passivated chip
- Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

MARKING

Product	Marking Code	Product	Marking Code
SM220FL	2S	SM260FL	6S
SM230FL	3S	SM280FL	8S
SM240FL	4S	SM2100FL	AS

SOD-123FL



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	2.90	E	0.10	0.30
B	1.80	2.00	F	0.80	1.20
C	1.55	1.25	G	0.35	0.85
D	3.50	3.90			

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123FL	2.5K	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%.)

Parameter	Symbol	Part Number						Unit
		SM 220FL	SM 230FL	SM 240FL	SM 260FL	SM 280FL	SM 2100FL	
Maximum Recurrent Reverse Voltage	V_{RRM}	20	30	40	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	60	80	100	V
Maximum Instantaneous Forward Voltage @ $I_{FM} = 2.0A$	V_F	0.50	0.55		0.72	0.85		V
Maximum Average Forward Rectified Current @ $T_J = 90^\circ C$	$I_{(AV)}$	2.0						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	40						A
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.3						mA
Typical Junction Capacitance	C_J	30						pF
Operating Temperature Range	T_J	-55~125						°C
Storage Temperature Range	T_{STG}	-55~150						°C

Notes: <http://www.secos.com/>

1. Measured at $f=1.0MHz$, $V_R=4.0V$

Any changes of specification will not be informed individually.

CHARACTERISTIC CURVES

FIG.1 – FORWARD DERATING CURVE

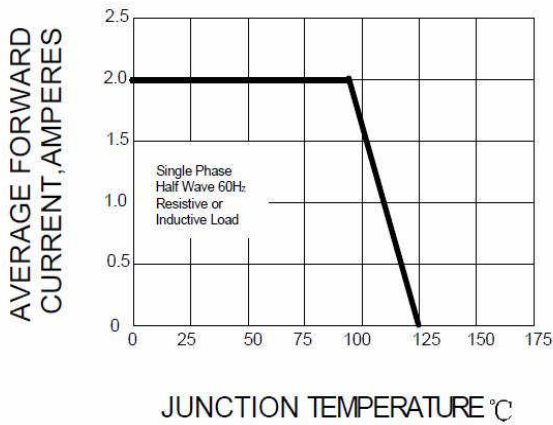


FIG.2– PEAK FORWARD SURGE CURRENT

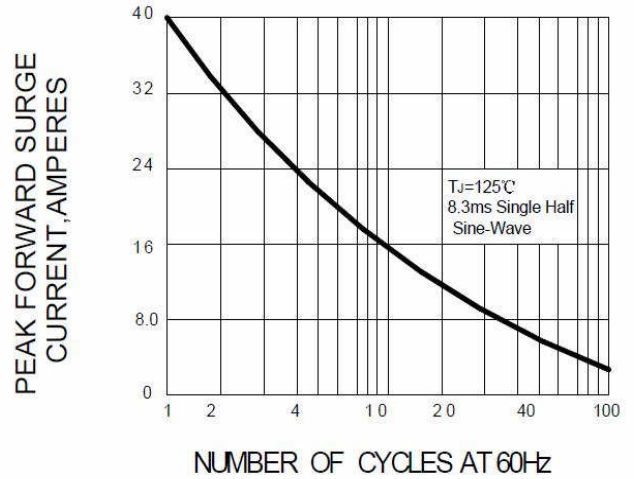


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

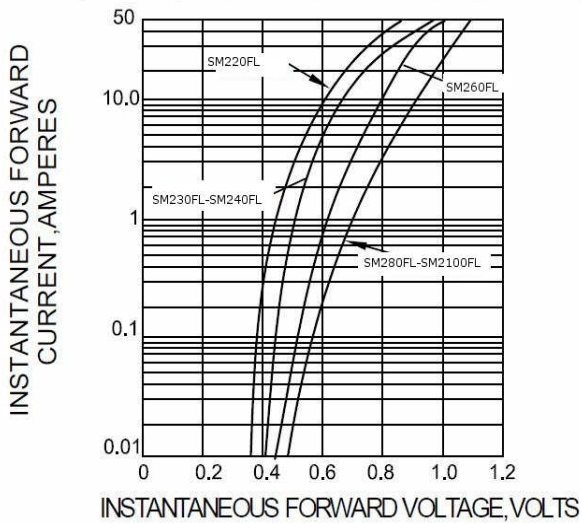


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

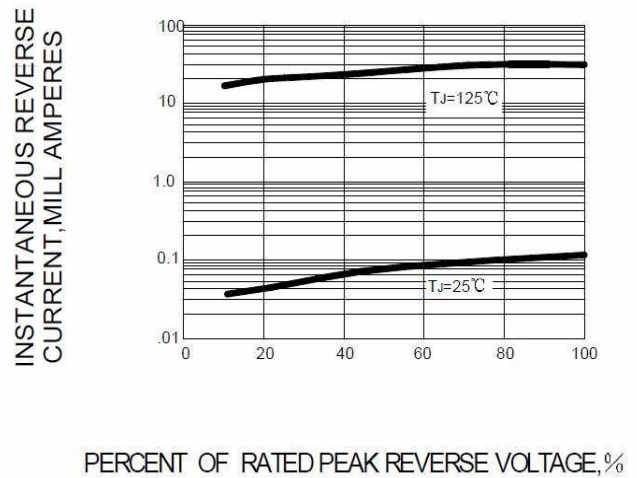


FIG.5–TYPICAL JUNCTION CAPACITANCE

