

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

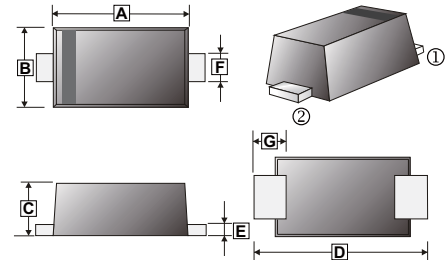
MECHANICAL DATA

- 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

Product	Marking Code
SM340FL	V6

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			

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 RMS Voltage	V_{RMS}	42	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Maximum Average Forward Rectified Current @ $T_J=25^\circ\text{C}$	I_F	3	A
Peak Forward Surge Current @8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80	A
Maximum Instantaneous Forward Voltage @3A	V_F	0.65	V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$	I_R	0.5	mA
Typical Junction Capacitance ¹	C_J	70	pF
Typical Thermal Resistance	$R_{\theta JL}$	20	$^\circ\text{C} / \text{W}$
Operating Temperature Range	T_J	-50~125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-50~125	$^\circ\text{C}$

Notes :

1. Measured @ $f=1.0\text{MHz}$, $V_R=4.0\text{V}$

CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

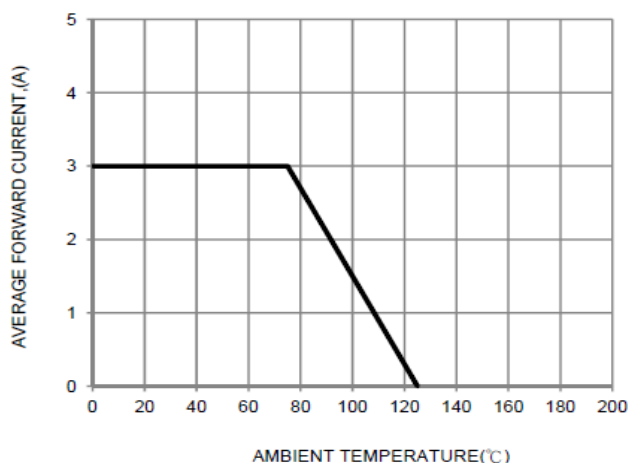


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

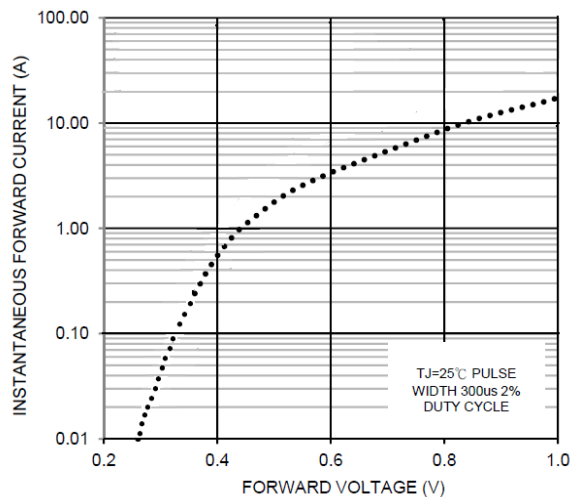


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

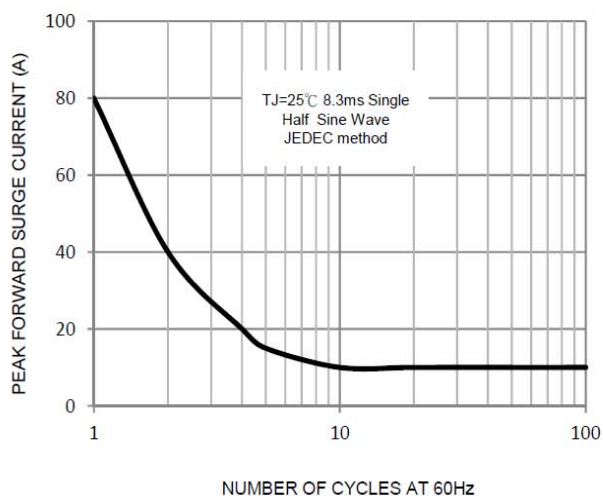


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

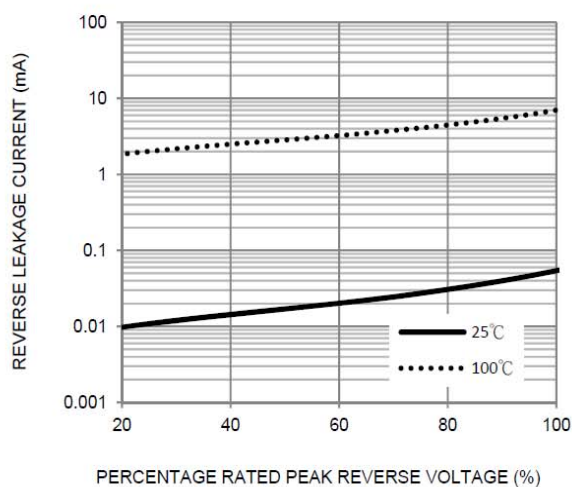


FIG. 5-TYPICAL JUNCTION CAPACITANCE

