

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

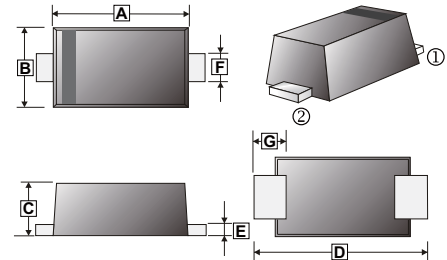
FEATURES

- Low profile package
- Ideal for automated placement
- Low reverse current
- Fast reverse recovery time

MECHANICAL DATA

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead free Plating (Tin Finish)
Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.002 gram (Approximate)

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			

MARKING

Part Number	Marking Code	Part Number	Marking Code
SEF101FL	H1	SEF105FL	H5
SEF102FL	H2	SEF106FL	H6
SEF103FL	H3	SEF107FL	H7
SEF104FL	H4		

PACKAGE INFORMATION

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

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Part Number							Unit
		SEF 101FL	SEF 102FL	SEF 103FL	SEF 104FL	SEF 105FL	SEF 106FL	SEF 107FL	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I _F	1							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30							A
Maximum Instantaneous Forward Voltage I _F =1A @ 25°C	V _F	1.0		1.3		1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _C =25°C	5							µA
	T _C =100°C	100							
Maximum Reverse Recovery Time ²	T _{RR}	50				75			nS
Typical Junction Capacitance ¹	C _J	20							pF
Typical Thermal Resistance	R _{θJA}	80							°C/W
Operating & Storage Temperature	T _J , T _{STG}	-55~ 150							°C

Notes:

1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC
2. Measured with I_F=0.5A, I_R=1A, I_{RR}=0.25A

RATINGS AND CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

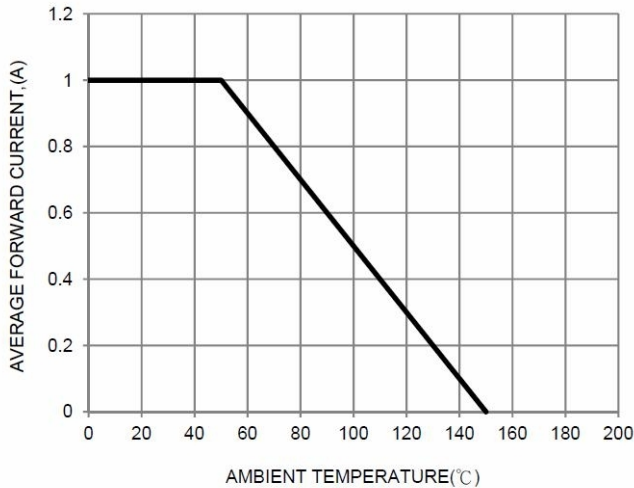


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

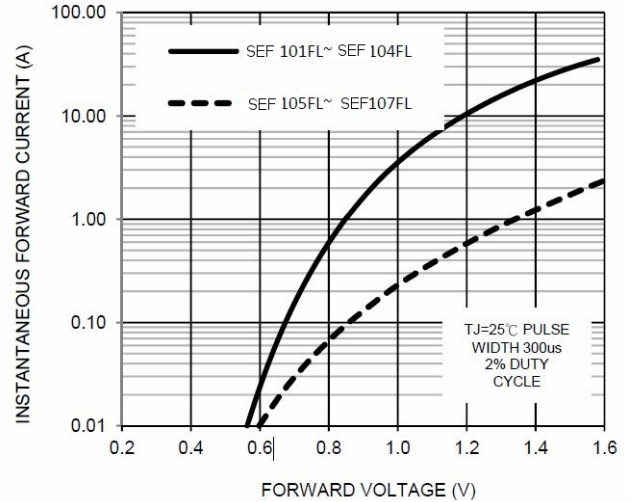


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

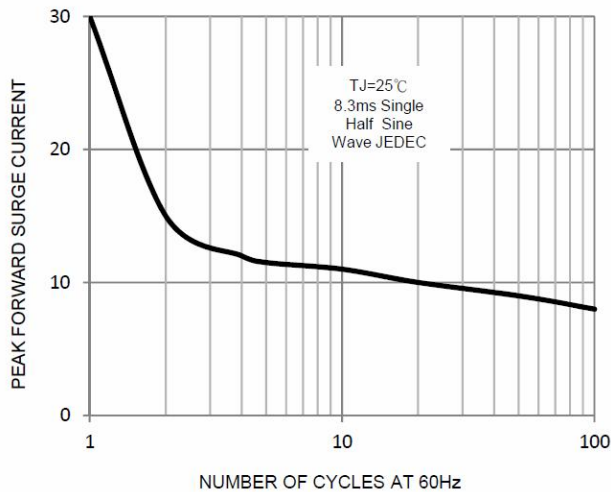


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

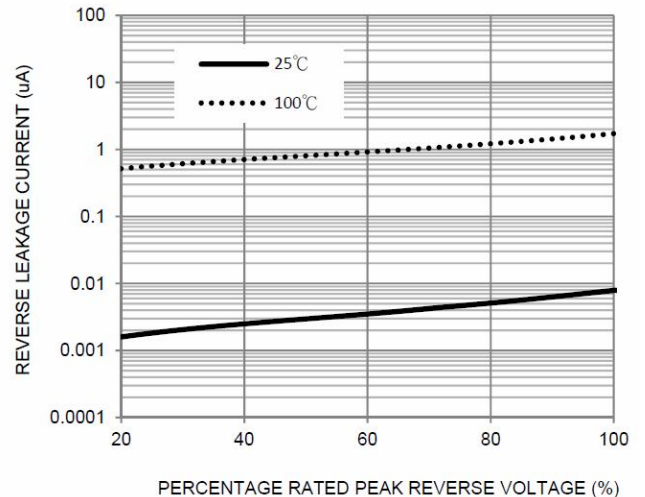


FIG. 5-TYPICAL JUNCTION CAPACITANCE

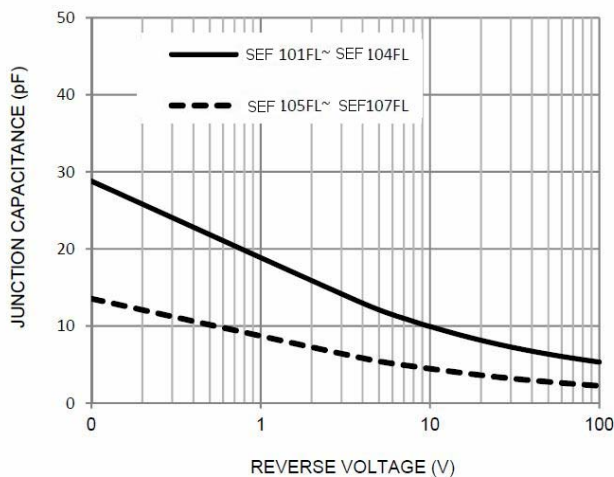


FIG. 6-Reverse Recovery Time Characteristic and Test Circuit

