Elektronische Bauelemente

SEF101FL~SEF107FL

Voltage 50 ~ 1000 V

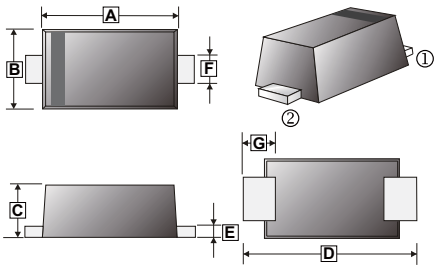
1.0 Amp High Efficiency Recovery Rectifiers

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

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			

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)

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	I_R	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		$R_{\theta JA}$	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

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

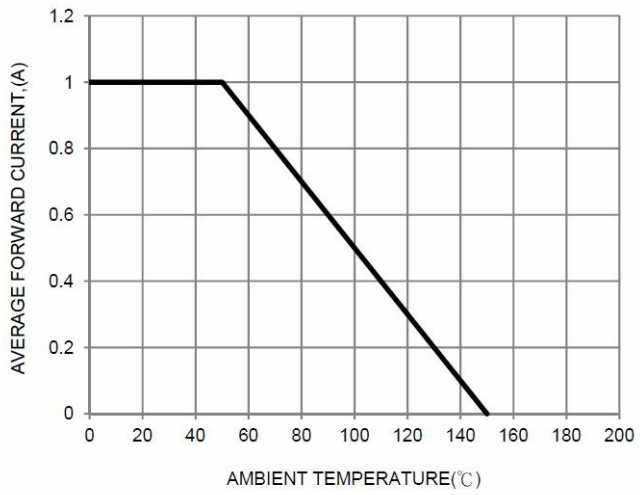


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

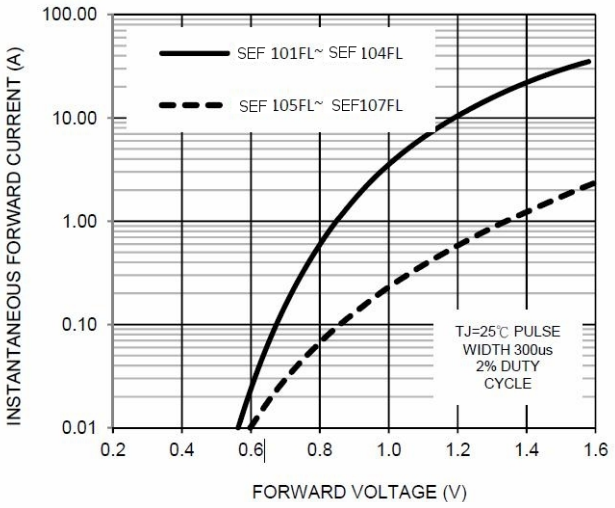


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

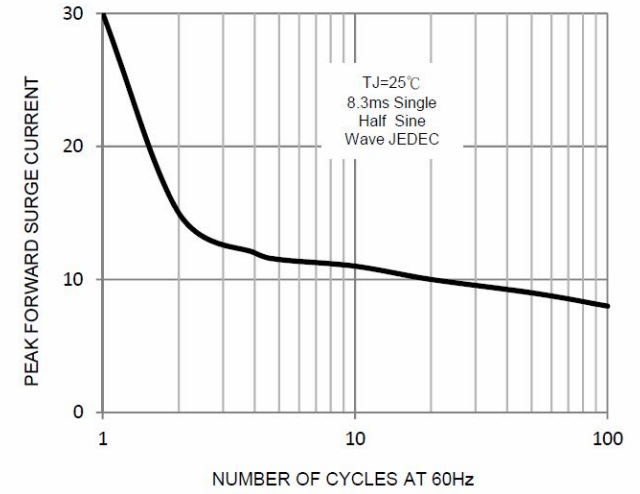


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

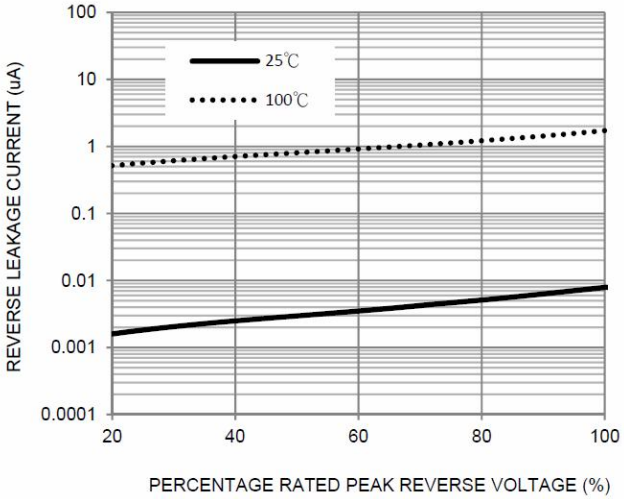


FIG. 5-TYPICAL JUNCTION CAPACITANCE

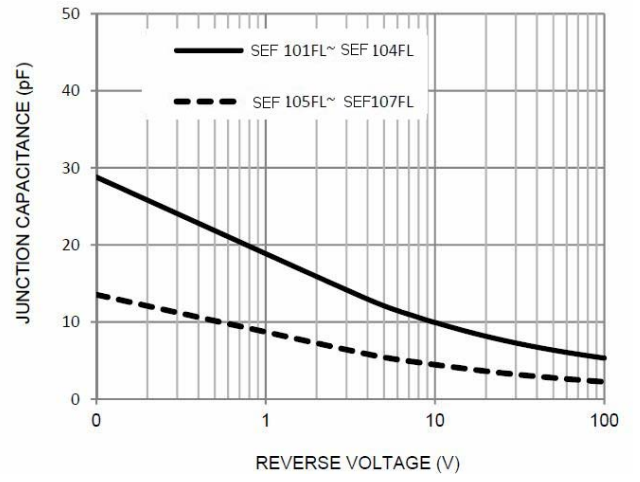
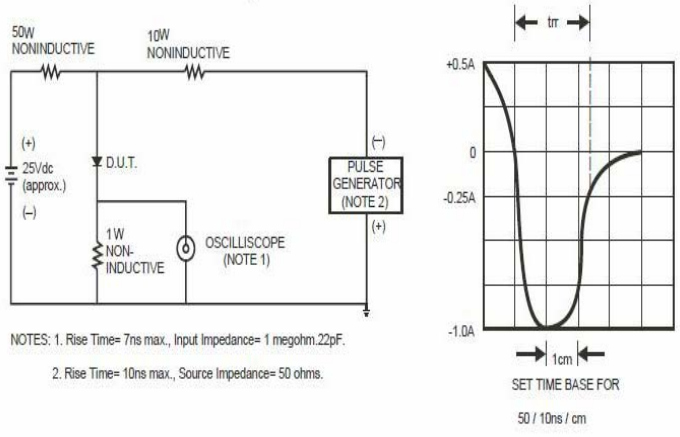


FIG. 6-Reverse Recovery Time Characteristic and Test Circuit



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.