Elektronische Bauelemente

SEF101JD~SEF107JD

Voltage 50 ~ 1000 V

1.0 Amp High Efficiency Recovery Rectifiers

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

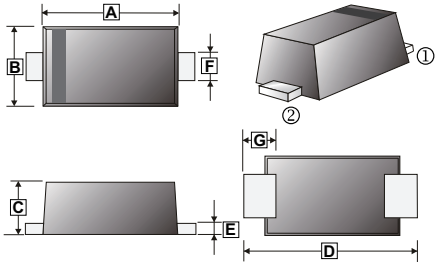
FEATURES

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

MECHANICAL DATA

- Case: JEDEC SOD-123JD
- Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end

SOD-123JD



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.6	2.9	E	0.1	0.2
B	1.7	1.9	F	0.8	1.1
C	0.9	1.1	G	0.7	0.9
D	3.5	3.8			

MARKING

Part Number	Marking Code	Part Number	Marking Code
SEF101JD	USL	SEF105JD	USH
SEF102JD		SEF106JD	
SEF103JD		SEF107JD	
SEF104JD	USM		

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123JD	3K	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
			SEF 101JD	SEF 102JD	SEF 103JD	SEF 104JD	SEF 105JD	SEF 106JD	SEF 107JD	
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}	25							A
Maximum Instantaneous Forward Voltage I_F=1A @ 25℃		V_F	1.0			1.4	1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	5							μA
	T_A=125℃		100							
Maximum Reverse Recovery Time [1]		T_{RR}	50				75			nS
Typical Thermal Resistance [2]		$R_{\theta JL}$	20							℃/W
Typical Thermal Resistance [2]		$R_{\theta JC}$	40							℃/W
Operating & Storage Temperature		T_J,T_{STG}	-55~ 150							℃

Notes：

1. Measured with I_F=0.5A,I_R=1A,I_{RR}=0.25A
2. P.C.B. mounted with 10 X 10 x 0.2 mm copper pad areas.

CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

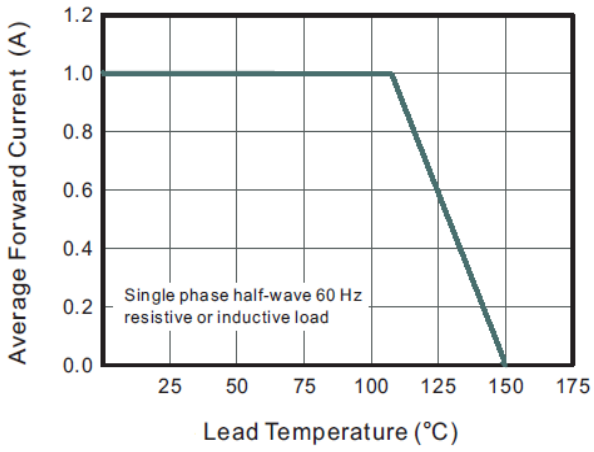


Fig.2 Typical Reverse Characteristics

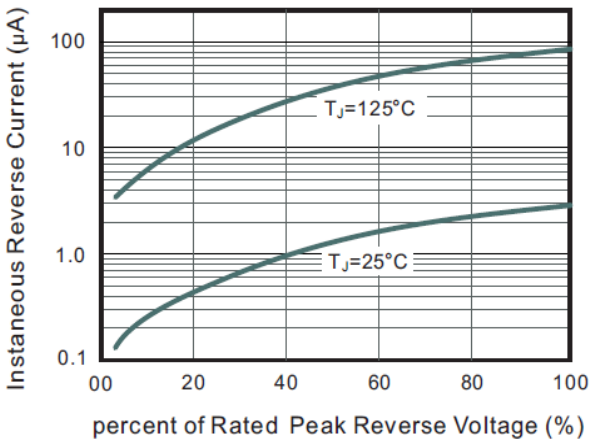


Fig.3 Typical Instaneous Forward Characteristics

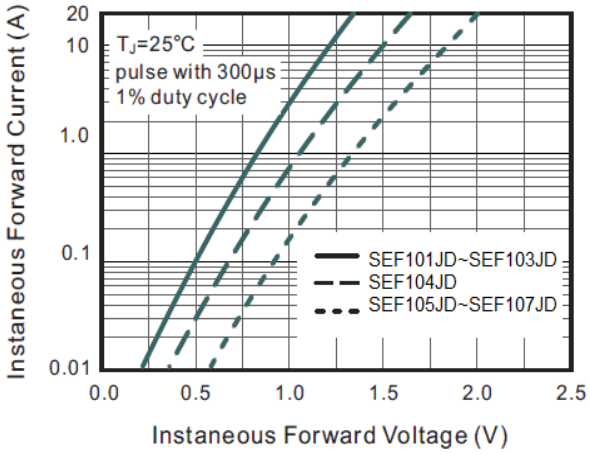


Fig.4 Maximum Non-Repetitive Peak Forward Surage Current