Elektronische Bauelemente

SEF112B-C

Voltage 1200V

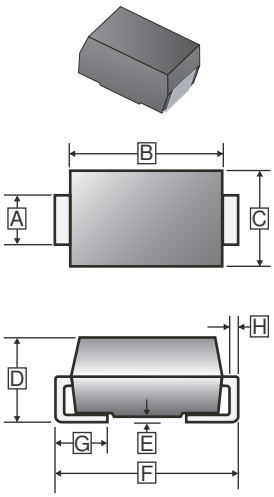
1.0 Amp High Voltage Ultrafast Rectifier

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

FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering
- Low Revise Current

SMB



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.85	2.20	E	-	0.203
B	4.00	4.75	F	5.08	5.59
C	3.25	3.94	G	0.75	1.52
D	1.99	2.61	H	0.15	0.31

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

ORDER INFORMATION

Part Number	Type
SEF112B-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25℃ ambient temperature unless otherwise s pecified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load de-rate current by 20%.)

Parameter		Symbol	Ratings	Unit
Repetitive Peak Reverse Voltage		V_{RRM}	1200	V
RMS Voltage		V_{RMS}	850	V
Average Forward Current	T_J=25℃	$I_{F(AV)}$	1	A
Peak Forward Current @8.3ms, single half sine wave		I_{FSM}	25	A
Maximum Instantaneous Forward Voltage @I_F=1A	T_A=25℃	V_F	1.9 (Typ. 1.6)	V
	T_A=125℃		1.6 (Typ. 1.2)	
Maximum Reverse Current @V_R=1200V	T_J=25℃	I_R	5	μA
	T_J=125℃		50	
Typical Junction Capacitance [2]		C_J	4.5	pF
Typical Thermal Resistance [3]		$R_{\theta JA}$	80	℃/W
Reverse Recovery Time [1]		T_{RR}	75 (Typ. 60)	nS
Operating Temperature Range		T_J	-50~150	℃
Storage temperature		T_{STG}	-65~150	℃

Notes:

1. Measured with I_F=0.5A, I_{RR}=0.25A, I_R=1A.
2. Measured at 1MHz and applied reverse voltage of 5V D.C.
3. Thermal Resistance Junction to Ambient. Printed circuit board FR4 copper pad 1×1cm, 35um thickness.

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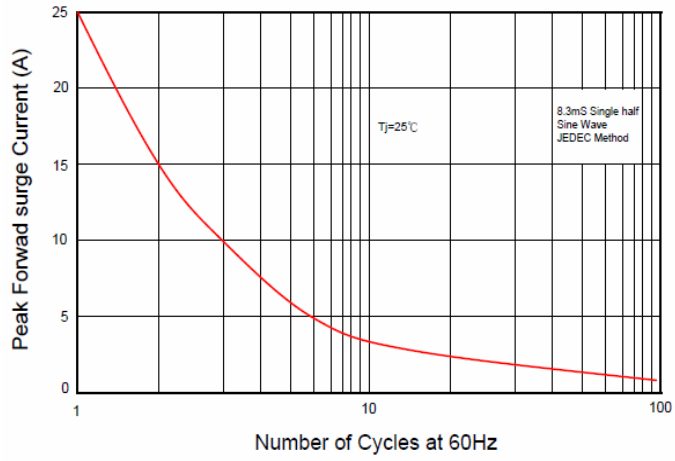
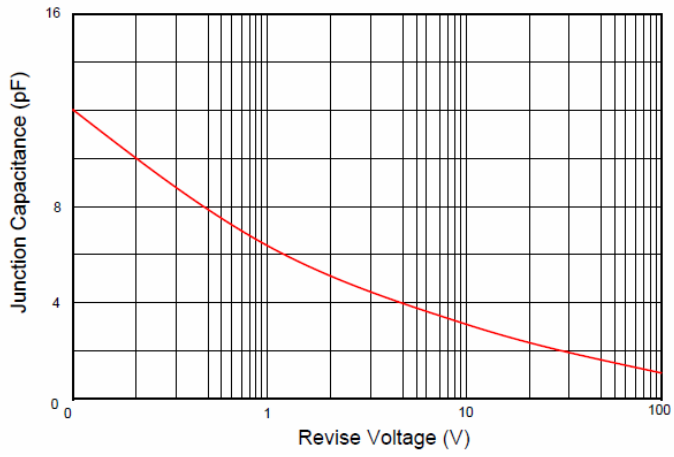
RATINGS AND CHARACTERISTIC CURVES

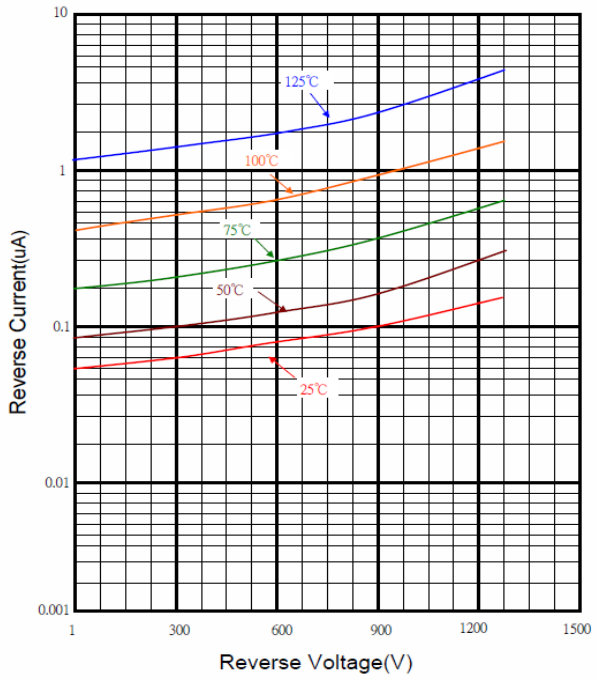
Maximum Non- Repetitive Forward Surge Current



Typical Junction Capacitance



Typical Reverse Characteristic



Typical Forward Characteristic