Elektronische Bauelemente

SEF207B

Voltage 1000 V

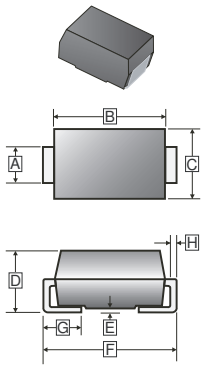
2.0 Amp High Efficiency Recovery Rectifiers

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

FEATURES

- Fast switching for high efficiency
- Low forward voltage drop
- High current capability
- Low reverse leakage current
- High surge current capability
- Glass passivated chip

SMB



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.91	2.20	E	-	0.203
B	4.06	4.70	F	5.08	5.59
C	3.30	3.94	G	0.76	1.52
D	2.13	2.44	H	0.15	0.305

MECHANICAL DATA

- Case: Molded plastic SMB/DO-214AA
- Epoxy：UL 94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-750 method 2026
- Polarity：Color band denotes cathode
- Mounting position：Any
- Weight: 0.093 grams

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13' 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	Rating	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	1000	V
Maximum RMS Voltage		V_{RMS}	700	V
Maximum DC Blocking Voltage		V_{DC}	1000	V
Maximum Average Forward Rectified Current @T_A=90℃		I_F	2.0	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)		I_{FSM}	60	A
Maximum Instantaneous Forward Voltage @ 2.0A		V_F	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_J=25℃	I_R	5.0	μA
	T_J=125℃		100	
Maximum Reverse Recovery Time [1]		T_{RR}	75	nS
Typical Junction Capacitance [2]		C_J	50	pF
Typical Thermal Resistance [3]		$R_{\theta JA}$	55	℃/W
Operating & Storage Temperature		T_J,T_{STG}	-55~ 150	℃

Notes:
1. Reverse recovery test condition：I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Thermal Resistance junction to ambient.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

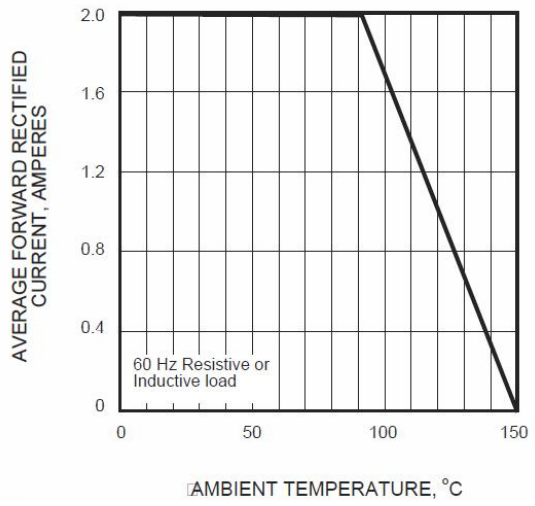

FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

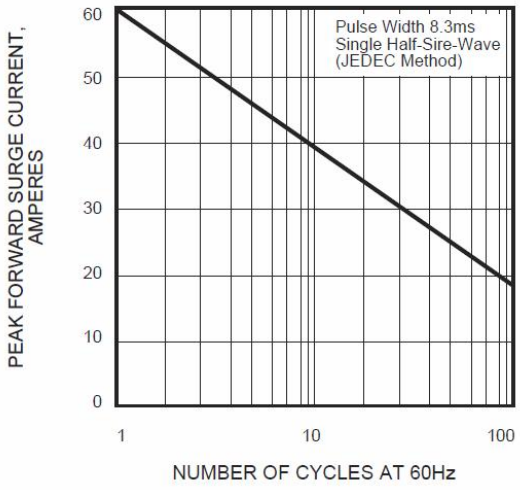

FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

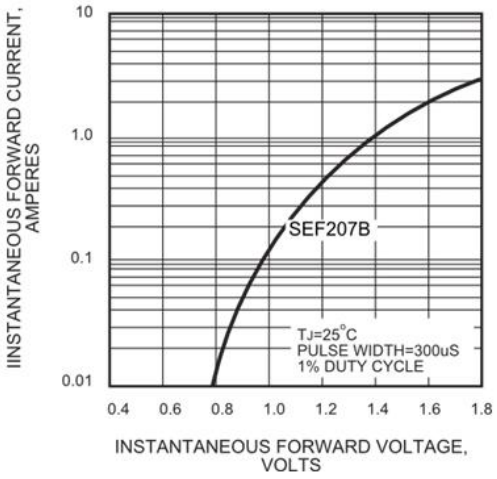

FIG.4 - TYPICAL REVERSE CHARACTERISTICS

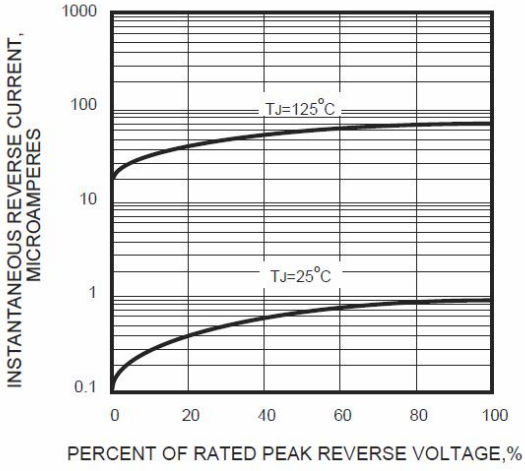

FIG.5 - TYPICAL JUNCTION CAPACITANCE