

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

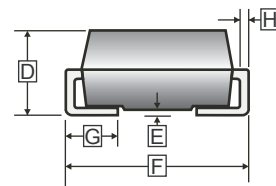
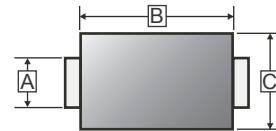
### FEATURES

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Fast switching speed

### MECHANICAL DATA

- Case: Molded plastic
- Epoxy : UL 94V-0 rate flame retardant
- Metallurgically bonded construction
- Polarity : Color band denotes cathode end
- Mounting position : Any

#### SMB



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.91	2.20	E	-	0.203
B	4.06	4.75	F	5.08	5.59
C	3.30	3.94	G	0.76	1.52
D	1.95	2.65	H	0.15	0.31

### 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	Part Number							Unit
		SEF 201B	SEF 202B	SEF 203B	SEF 204B	SEF 205B	SEF 206B	SEF 207B	
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. 375"(9.5mm) Lead Length @ $T_A=55^\circ C$	$I_F$	2							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50					60		A
Maximum Instantaneous Forward Voltage @ 2.0A	$V_F$	1		1.3	1.5	1.7		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	5.0							$\mu A$
	$T_A=100^\circ C$	100							
Maximum Reverse Recovery Time <sup>1</sup>	$T_{RR}$	50					75		nS
Typical Junction Capacitance <sup>2</sup>	$C_J$	15							pF
Thermal Resistance, Junction to Lead <sup>3</sup>	$R_{\theta JL}$	18							$^\circ C/W$
Thermal Resistance, Junction to Ambient <sup>3</sup>	$R_{\theta JA}$	55							$^\circ C/W$
Operating & Storage Temperature	$T_J, T_{STG}$	-50~ 150							$^\circ C$

#### Notes:

1. Reverse Recovery Time 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. Rating applies when surface mounted on the minimum pad size recommended, PC Board with 7.0 X 7.0mm copper pad

**RATINGS AND CHARACTERISTIC CURVES**

FIG.1-TYPICAL FORWARD CHARACTERISTICS

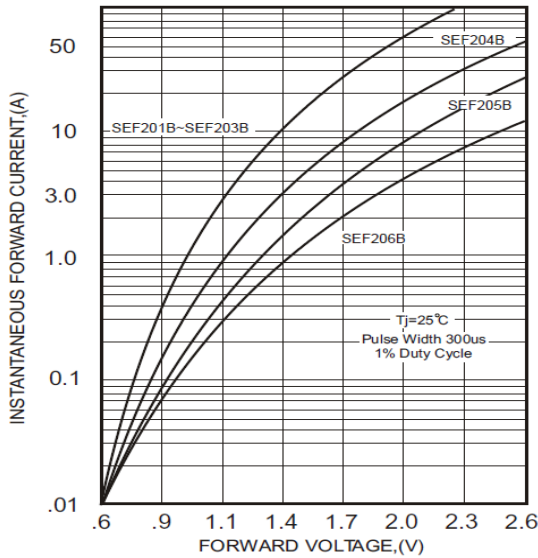


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

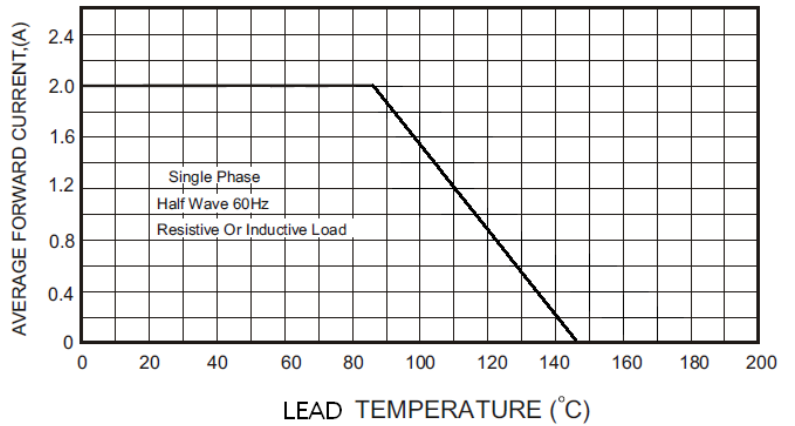
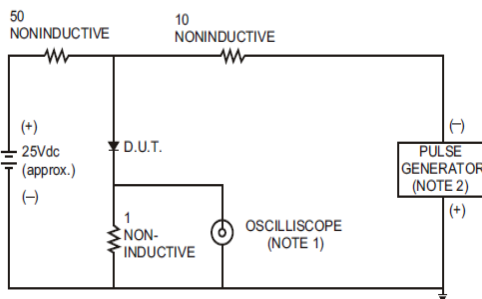


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.  
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

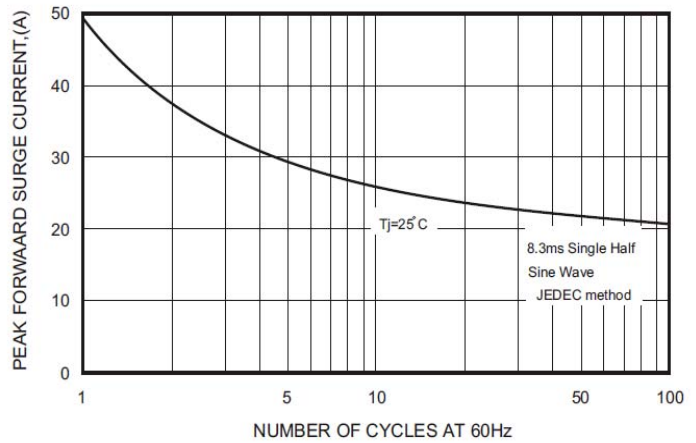


FIG.5-TYPICAL JUNCTION CAPACITANCE

