

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

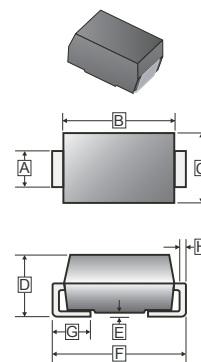
FEATURES

- 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
- Weight: 1.10 grams

SMB



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.91	2.11	E	-	0.203
B	4.06	4.70	F	5.08	5.59
C	3.30	3.94	G	0.76	1.27
D	2.13	2.44	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 301B	SEF 302B	SEF 303B	SEF 304B	SEF 305B	SEF 306B	
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage		V _{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	800	V
Maximum Average Forward Rectified Current. 375"(9.5mm) Lead Length @T _A =55°C		I _F	3						A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	80						A
Maximum Instantaneous Forward Voltage @ 3.0A		V _F	1			1.3	1.5	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	5.0						μA
	T _A =100°C		100						
Maximum Reverse Recovery Time ¹		T _{RR}	50					75	nS
Typical Junction Capacitance ²		C _J	15						pF
Operating & Storage Temperature		T _J , T _{STG}	-65~ 175						°C

Notes:

1. Reverse Recovery Time test condition : $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD

CHARACTERISTICS

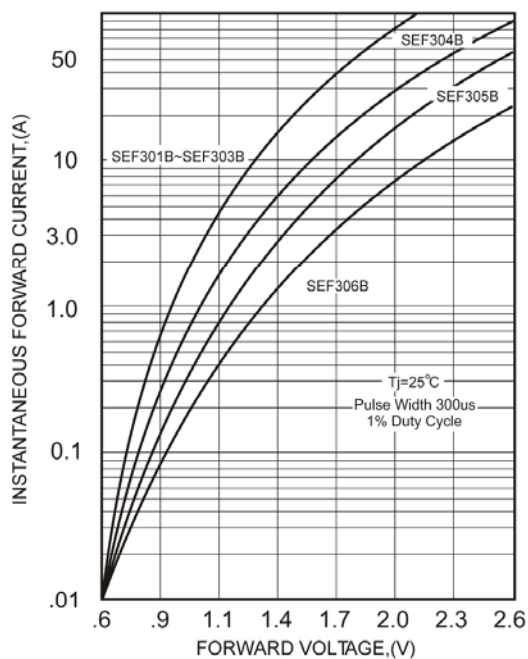


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

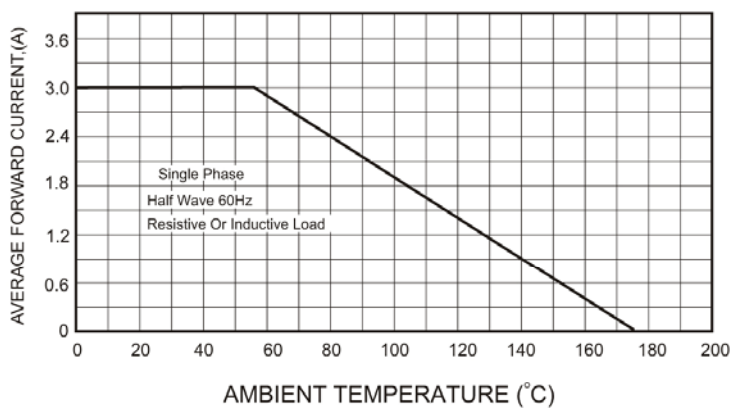
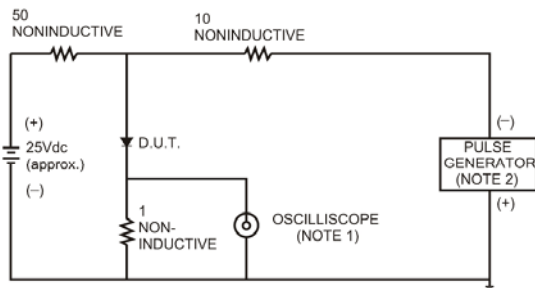


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE

RECOVERY TIME CHARACTERISTICS



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

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

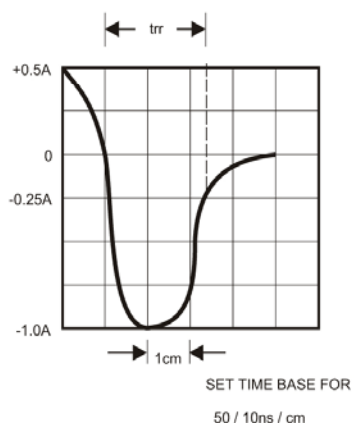


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

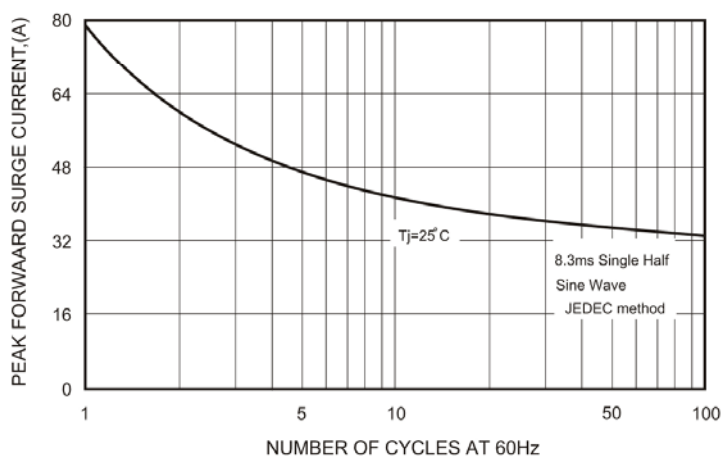


FIG.5-TYPICAL JUNCTION CAPACITANCE

