

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

MECHANICAL DATA

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

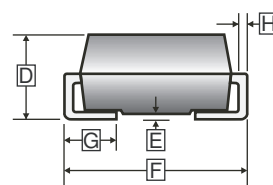
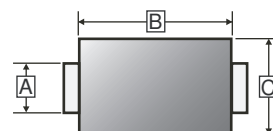
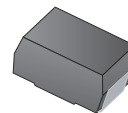
PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

ORDER INFORMATION

Part Number	Type
SMF301B-C~SMF307B-C	Lead (Pb)-free and Halogen-free

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

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
			SMF 301B-C	SMF 302B-C	SMF 303B-C	SMF 304B-C	SMF 305B-C	SMF 306B-C	SMF 307B-C	
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°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 @3A		V _F	1.3				1.5	1.7		V
Maximum DC Reverse Current @Rated DC Blocking Voltage	T _J =25°C	I _R	5							μA
	T _J =100°C		250							
Maximum Reverse Recovery Time ¹		T _{RR}	150				250	500		nS
Typical Thermal Resistance from Junction-Lead		R _{θJL}	25							°C/W
Typical Thermal Resistance from Junction-Case ³		R _{θJC}	30							
Typical Junction Capacitance ²		C _J	44							pF
Operating & Storage Temperature		T _J ,T _{STG}	-55~150							°C

Notes:

1. Reverse Recovery Time test condition: $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$.
2. Measured at 1MHz and applied reverse voltage of 4V D.C.
3. Thermal Resistance: Junction to terminal, unit mounted on PC board with 5.0mm² (0.013mm thick) copper pads as heat sink.

<http://www.SeCoSGmbH.com/>

Any changes of specification will not be informed individually.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD

CHARACTERISTICS

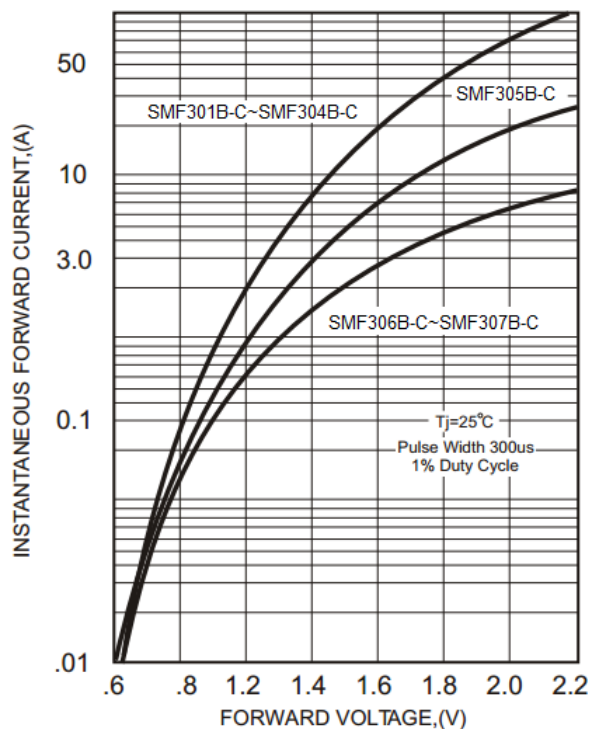


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

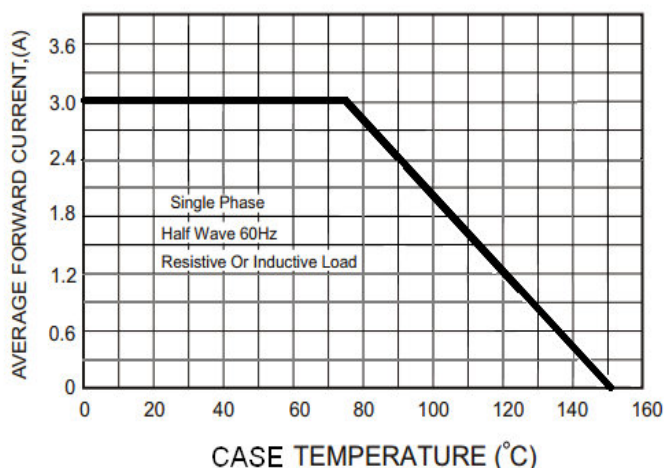
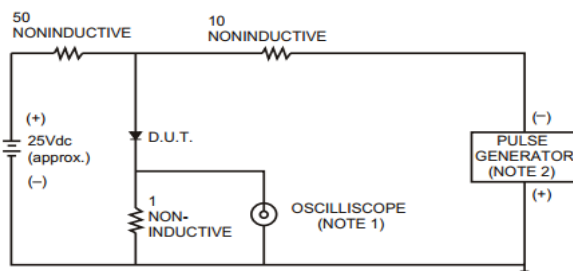


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

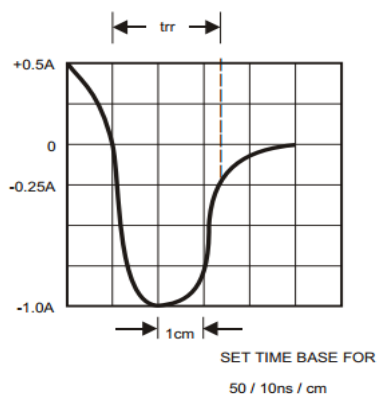


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

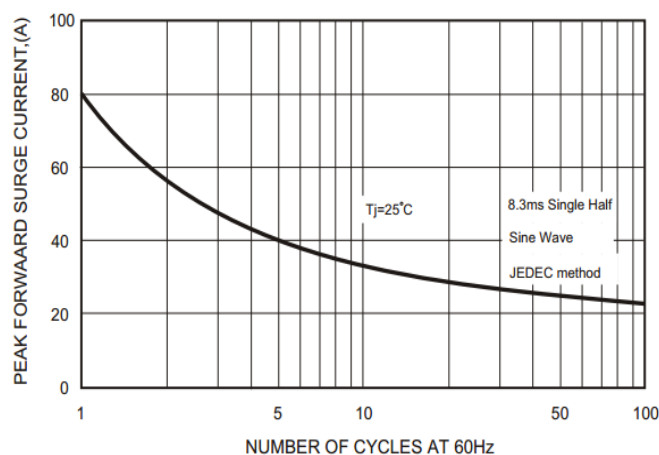


FIG.5-TYPICAL JUNCTION CAPACITANCE

