

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
- Low forward voltage drop

## MECHANICAL DATA

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

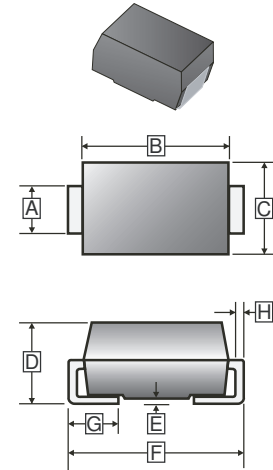
## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

## ORDER INFORMATION

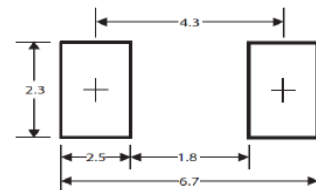
Part Number	Type
SM220B-C~SM2100B-C	Lead (Pb)-free and Halogen-free

### 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

### Mounting Pad Layout



\*Dimensions in millimeters

## 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
		SM220B-C	SM240B-C	SM260B-C	SM2100B-C	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	40	60	100	V
Working Peak Reverse Voltage	$V_{RSM}$	20	40	60	100	V
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	100	V
Maximum Average Forward Rectified Current, See Fig. 1	$I_F$	2				A
Peak Forward Surge Current @8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	60				
Maximum Instantaneous Forward Voltage @2A	$V_F$	0.52	0.65	0.83	V	
Maximum DC Reverse Current @Rated DC Blocking Voltage	$I_R$	0.2	0.1		mA	
	$T_A=25^\circ\text{C}$	15	10	4		
Typical Junction Capacitance <sup>1</sup>	$C_J$	170				pF
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JA}$	24				°C/W
Operating Temperature Range	$T_J$	-55~125		-55~150		°C
Storage Temperature Range	$T_{STG}$	-55~150				°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.
2. Valid provided that terminals are kept at ambient temperature.

**RATINGS AND CHARACTERISTIC CURVES**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

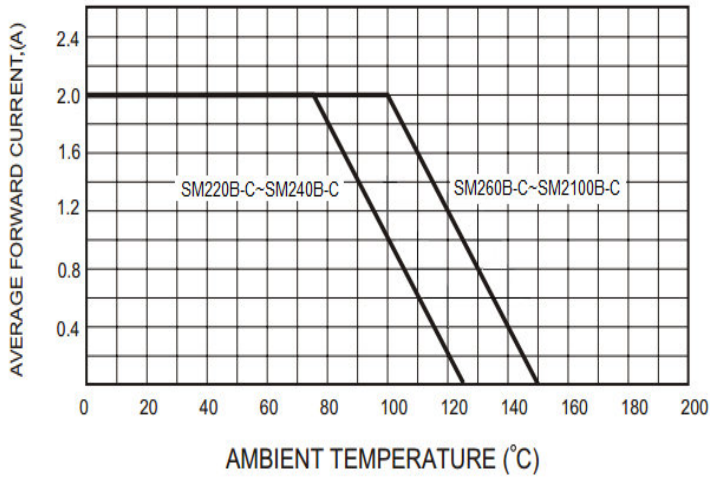


FIG.2-TYPICAL FORWARD CHARACTERISTICS

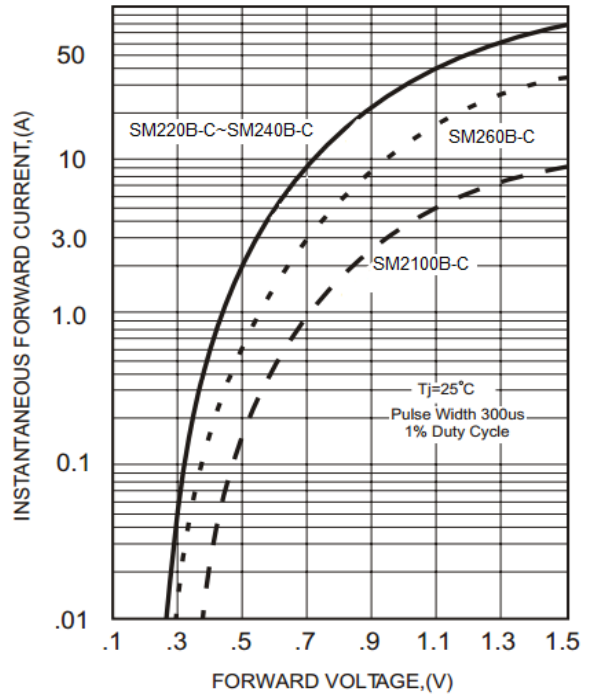


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

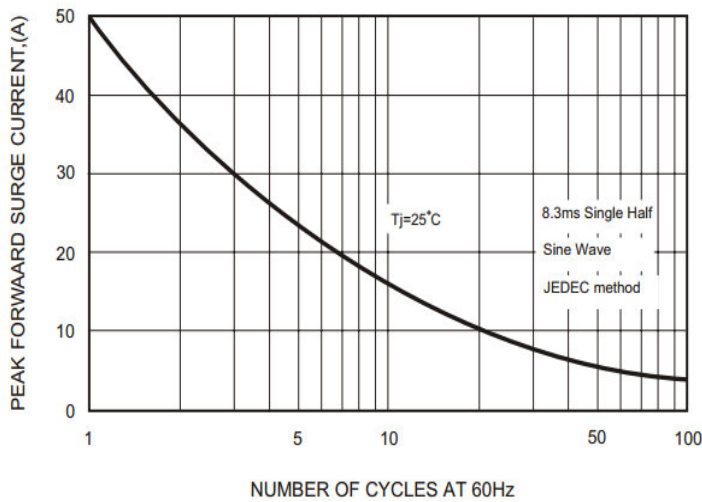


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

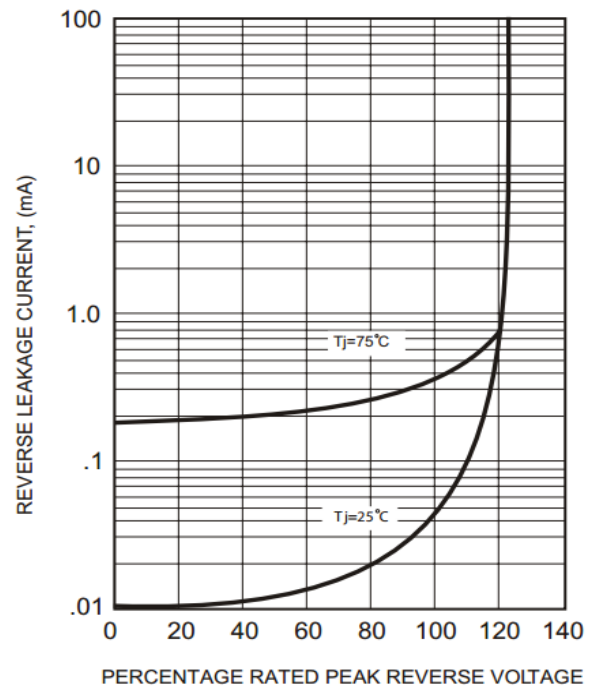


FIG.4-TYPICAL JUNCTION CAPACITANCE

