

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

## FEATURES

- RoHS Compliant Product
- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop

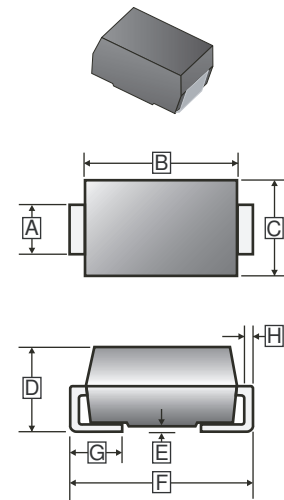
## MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Metallurgically bonded construction
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any
- Weight: 0.102 grams

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

### 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
		SM220B	SM240B	SM260B	SM2100B	
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	$I_F$	2.0				A
Peak Forward Surge Current @ 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	60				
Maximum Instantaneous Forward Voltage at 2.0A	$V_F$	0.52		0.65	0.83	V
Maximum DC Reverse Current At Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	$I_R$	0.2	0.1	0.1	mA
	$T_A=100^\circ\text{C}$		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 4.0V D.C.
2. Valid provided that terminals are kept at ambient temperature.

**RATINGS AND CHARACTERISTIC CURVES**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

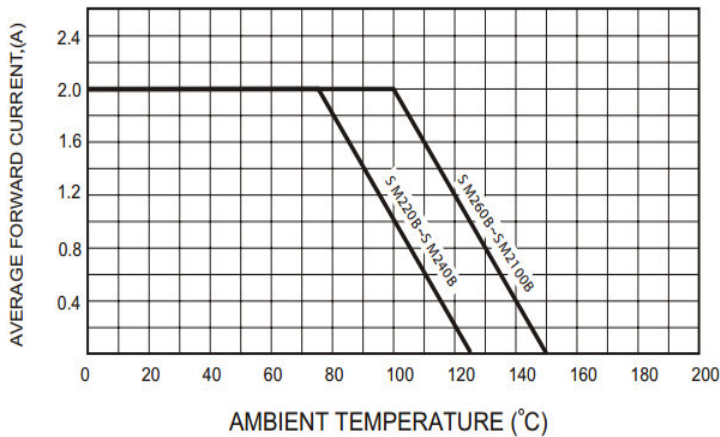


FIG.2-TYPICAL FORWARD CHARACTERISTICS

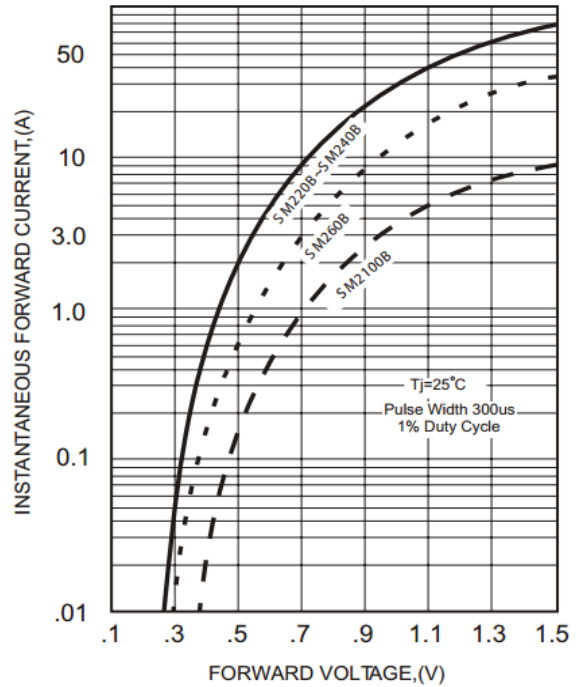


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

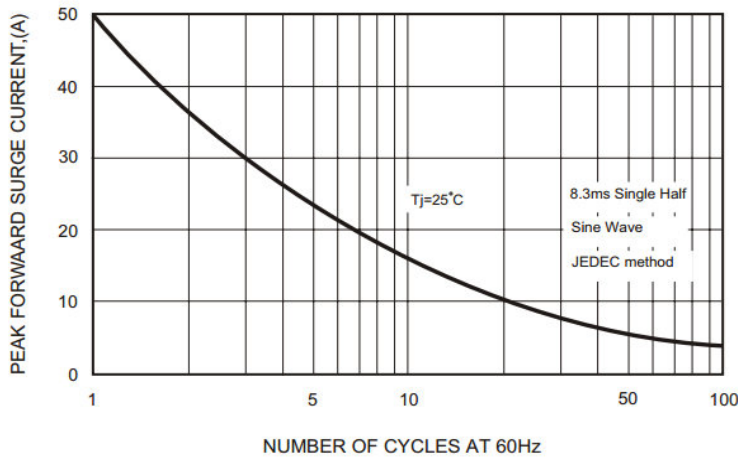


FIG.4-TYPICAL JUNCTION CAPACITANCE

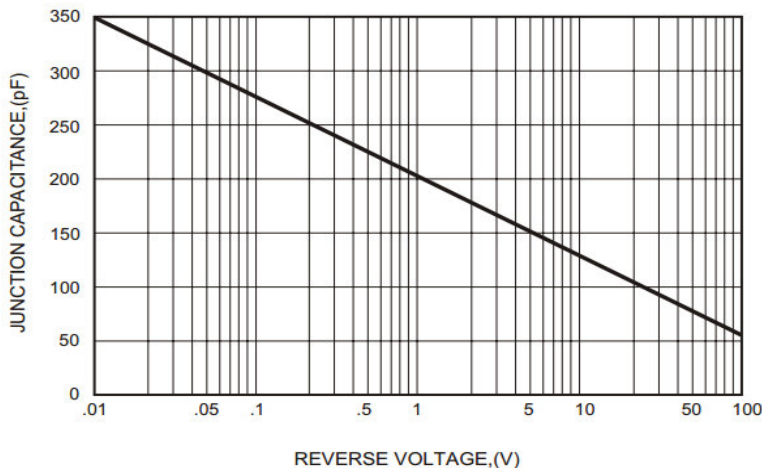


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

