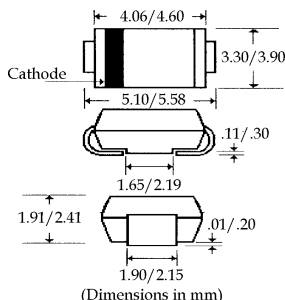


## Description



## Mechanical Dimensions

**DO-214AA  
(SMB)**

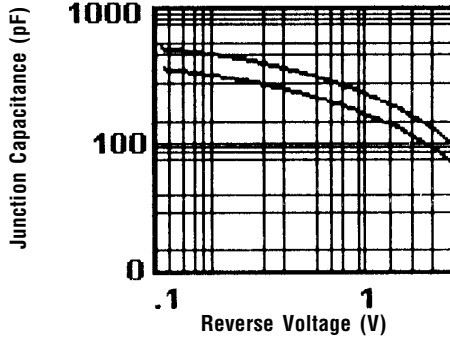


## Features

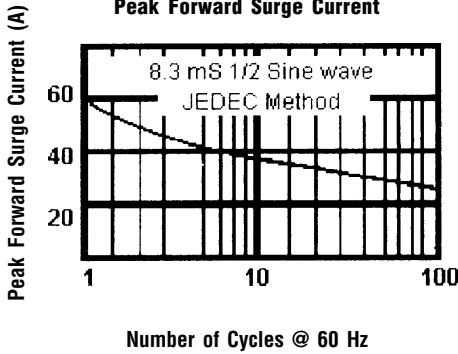
- EXTREMELY LOW  $V_F$
- MAJORITY CARRIER CONDUCTION
- LOW STORED CHARGE
- MEETS UL SPECIFICATION 94V-0
- LOW POWER LOSS - HIGH EFFICIENCY

<b>SMB220 . . . 2100 Series</b>							<b>Units</b>		
<b>Maximum Ratings</b>	<b>SMB220</b>	<b>SMB230</b>	<b>SMB240</b>	<b>SMB250</b>	<b>SMB260</b>	<b>SMB2100</b>			
Peak Repetitive Reverse Voltage... $V_{RRM}$	20	30	40	50	60	100	Volts		
Working Peak Reverse Voltage... $V_{RWM}$	20	30	40	50	60	100	Volts		
DC Blocking Voltage... $V_{DC}$	20	30	40	50	60	100	Volts		
RMS Reverse Voltage... $V_{R(rms)}$	14	21	28	35	42	70	Volts		
Average Forward Rectified Current... $I_{F(av)}$					2.0			Amps	
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$	< .....			50	> .....		Amps		
Operating Temperature Range... $T_J$	< .....		-65 to 125	> < .....		-55 to 150	> -65 to 150		°C
Storage Temperature Range... $T_{STRG}$	..... -65 to 150 .....						°C		
<b>Electrical Characteristics</b>									
Maximum Forward Voltage... $V_F$ (Note 2)	.45	.50	.55	.70	.70	.85	Volts		
Maximum DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage				0.5			mAmps		
	$T_C = 25^\circ C$						mAmps		
	$T_C = 100^\circ C$		< .....	20	> < .....		10	> 15	
Typical Junction Capacitance... $C_j$ (Note 1)	< .....		100	> .....		150	pF		
Typical Thermal Resistance... $R_{\theta JA}$	..... 100 .....						°C / W		

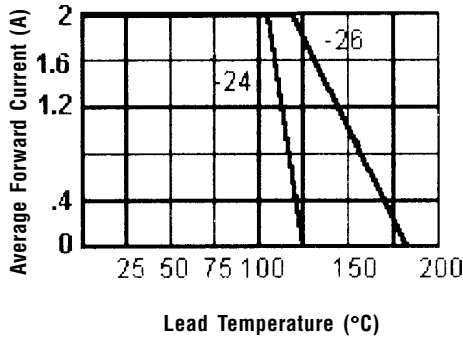
Typical Junction Capacitance



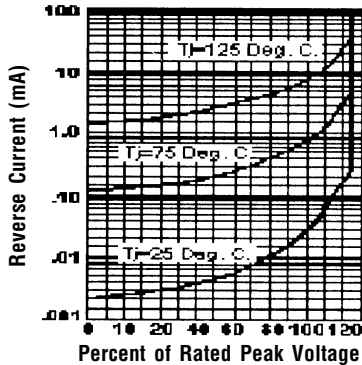
Non-Repetitive  
Peak Forward Surge Current



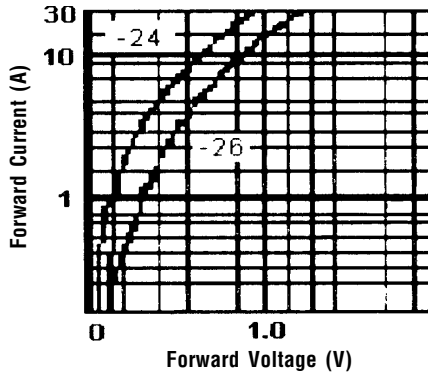
Forward Current Derating Curve



Typical Reverse Characteristics



Typical Instantaneous Forward Characteristics



Ratings at  
25 Deg. C ambient  
temperature  
unless otherwise  
specified.

Single Phase Half  
Wave, 60 Hz  
Resistive or  
Inductive Load.

For Capacitive  
Load, Derate  
Current by 20%.

- NOTES:** 1. Measured @ 1 MHz and applied reverse voltage of 4.0V.  
2. Measured with Pulse Width = 300  $\mu$ S, 2% Duty Cycle.