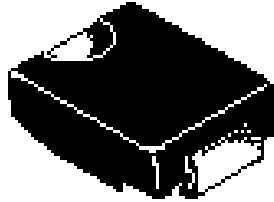


# 20 Amp SCHOTTKY BARRIER RECTIFIERS

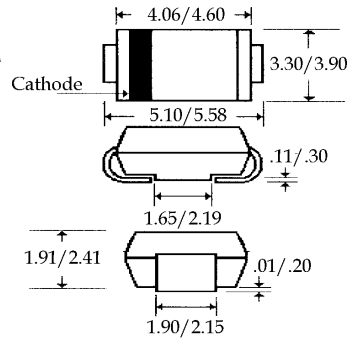
**SMB220...2100 Series**

## Description



## Mechanical Dimensions

**D0-214AA  
(SMB)**



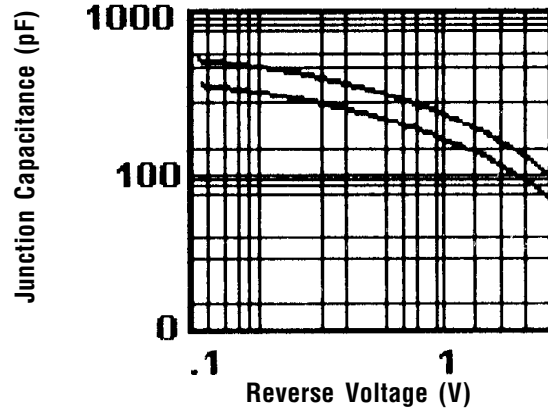
(Dimensions in mm)

## Features

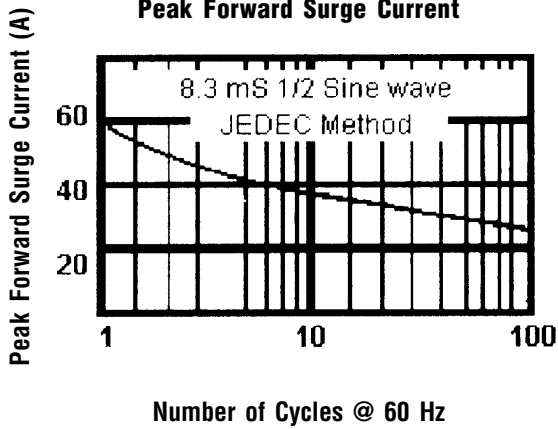
- EXTREMELY LOW  $V_F$
- LOW STORED CHARGE
- LOW POWER LOSS - HIGH EFFICIENCY
- MAJORITY CARRIER CONDUCTION
- MEETS UL SPECIFICATION 94V-0

SMB220 . . . 2100 Series							Units		
Maximum Ratings	SMB220	SMB230	SMB240	SMB250	SMB260	SMB2100			
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		
	$T_C = 25^\circ C$								
	$T_C = 100^\circ C$			< .....	20	> < .....	10	> 15	mAmps
Typical Junction Capacitance... $C_J$ (Note 1)	< .....			100	> 150		pF		
Typical Thermal Resistance... $R_{\theta JA}$	..... 100 .....						°C / W		

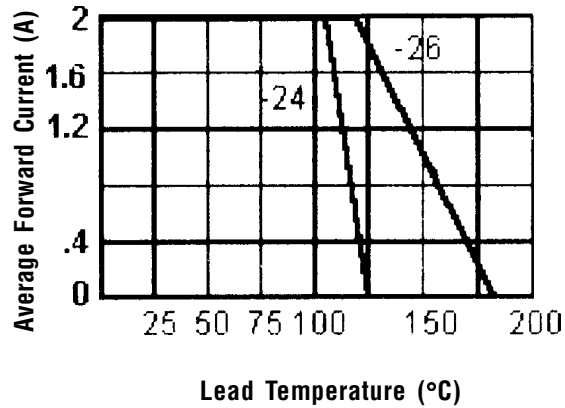
Typical Junction Capacitance



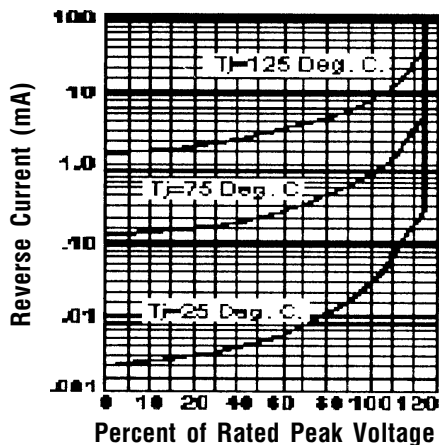
Non-Repetitive Peak Forward Surge Current



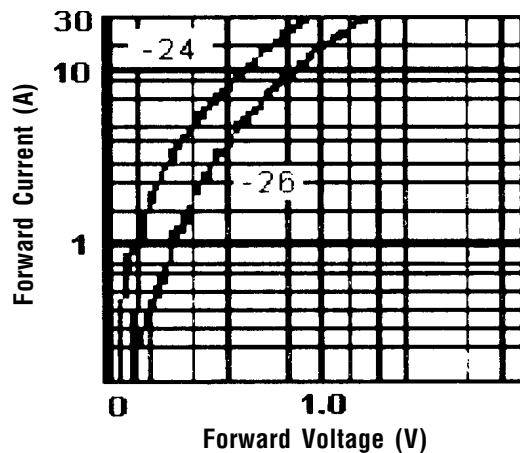
Forward Current Derating Curve



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.