

2.0 Amp SCHOTTKY BARRIER RECTIFIERS

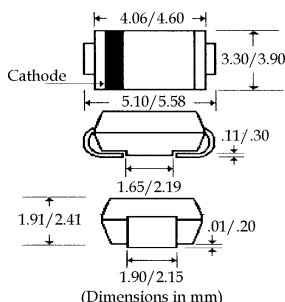
SMB220...2100 Series

Description



Mechanical Dimensions

DO-214AA (SMB)

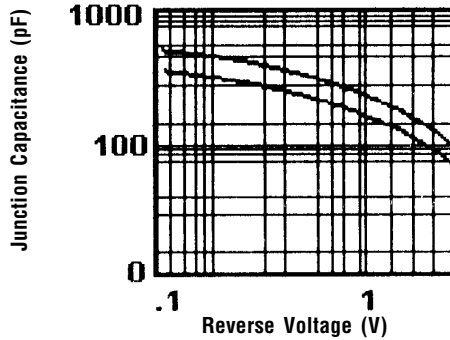


Features

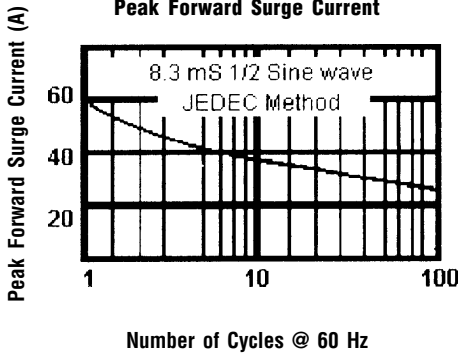
- EXTREMELY LOW V_F
- LOW STORED CHARGE
- LOW POWER LOSS - HIGH EFFICIENCY
- MAJORITY CARRIER CONDUCTION
- MEETS UL SPECIFICATION 94V-0

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			
Electrical Characteristics										
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		
				<		20	> <	10	> 15	mAmps
Typical Junction Capacitance... C_j (Note 1)	<			100	>		150	pF		
Typical Thermal Resistance... $R_{\theta JA}$ 100						°C / W			

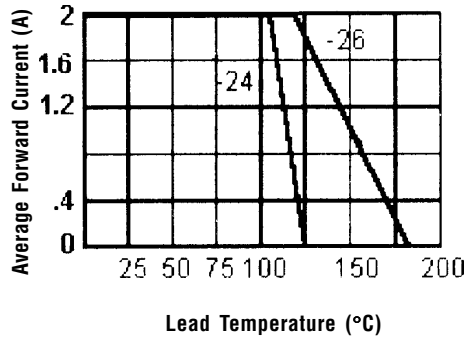
Typical Junction Capacitance



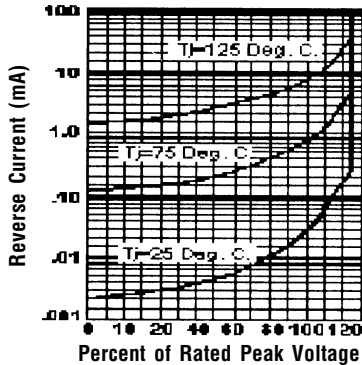
Non-Repetitive
Peak Forward Surge Current



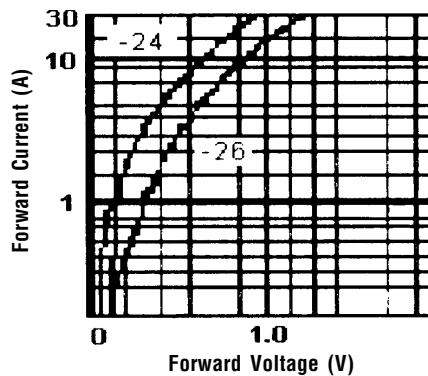
Forward Current Derating Curve



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 μ S, 2% Duty Cycle.