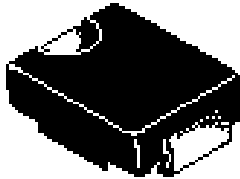
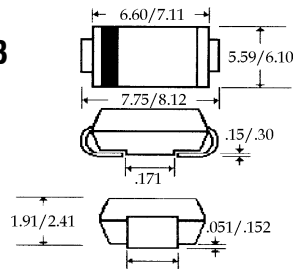


Description



Mechanical Dimensions

DO-214AB
(SMC)



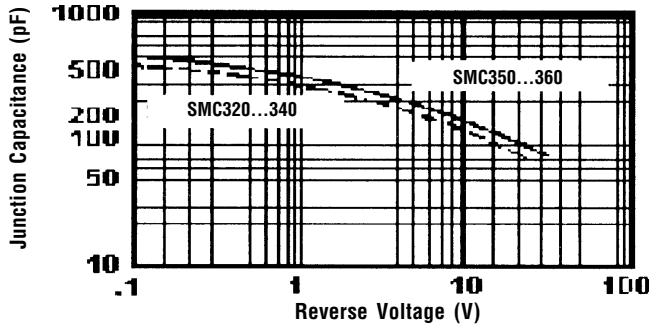
(Dimensions in mm)

Features

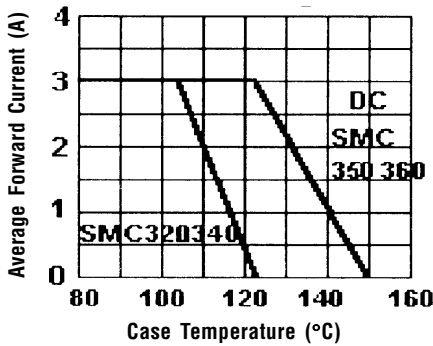
- EXTREMELY LOW V_F
- LOW STORED CHARGE
- LOW POWER LOSS - HIGH EFFICIENCY
- MAJORITY CARRIER CONDUCTION
- MEETS UL SPECIFICATION 94V-0

SMC320 . . . 3100 Series							Units	
Maximum Ratings	SMC320	SMC330	SMC340	SMC350	SMC360	SMC3100		
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... $I_{F(av)}$				3.0			Amps	
Non-Repetitive Peak Forward Surge Current... I_{FSM}				100			Amps	
Operating Temperature Range... T_J	<		-65 to 125	>		-65 to 150	°C	
Storage Temperature Range... T_{STRG}	<		-65 to 125	>		-65 to 150	°C	
Electrical Characteristics								
Maximum Forward Voltage... V_F (Note 2)	.50	.50	.55	.70	.70	.85	Volts	
Maximum DC Reverse Current... I_R @ Rated DC Blocking Voltage	$T_C = 25^\circ C$ $T_C = 100^\circ C$				0.5			mAmps
					20			mAmps
Typical Junction Capacitance... C_J	<		250	> <		360	> 200	pF
Typical Thermal Resistance... $R_{\theta JA}$				60			°C / W	

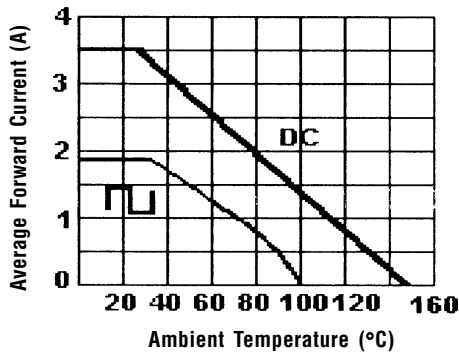
Typical Junction Capacitance



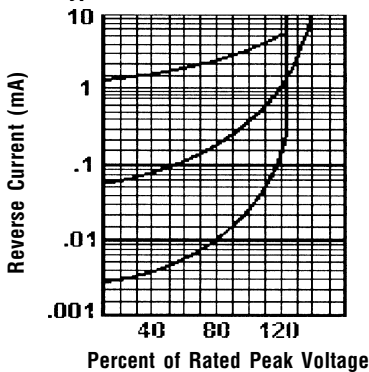
Forward Current Derating Curve



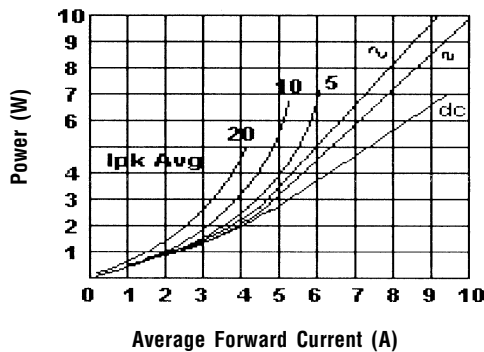
Forward Current Derating Curve



Typical Reverse Characteristics



Average Power Dissipation



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.