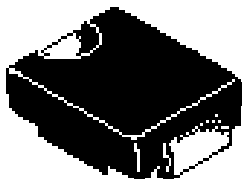




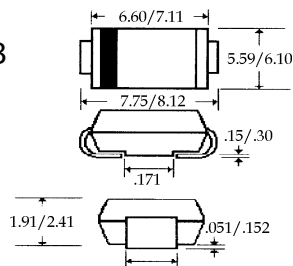
SMC320 ... 3100 Series

Description



Mechanical Dimensions

DO-214AB
(SMC)



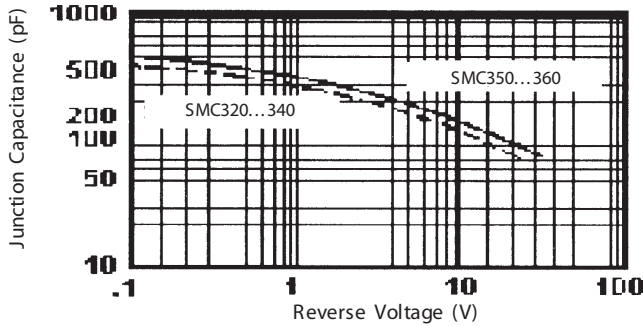
(Dimensions in mm)

Features

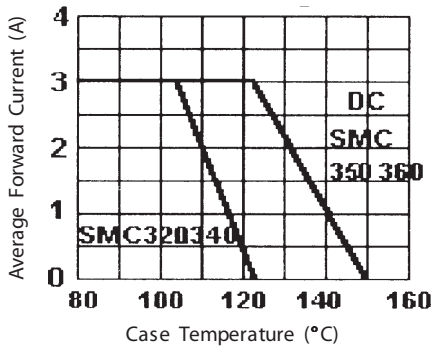
- EXTREMELY LOW V_F
- LOW STORED CHARGE
- LOW POWER LOSS – HIGH EFFICIENCY
- MAJORITY CARRIER CONDUCTION
- MEETS UL SPECIFICATION 94V-0

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				0.5			mAmps
$T_C = 25^\circ C$				20			mAmps
$T_C = 100^\circ C$							
Typical Junction Capacitance... C_J	<..... 250		><..... 360		> 200		pF
Typical Thermal Resistance... R_{qJA}				60			°C / W

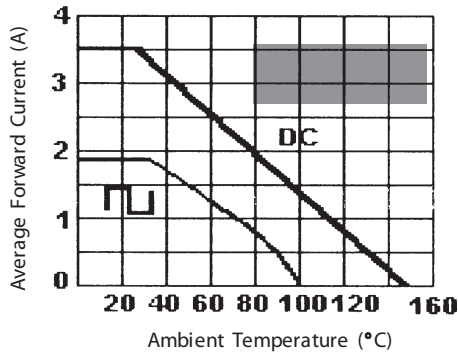
Typical Junction Capacitance



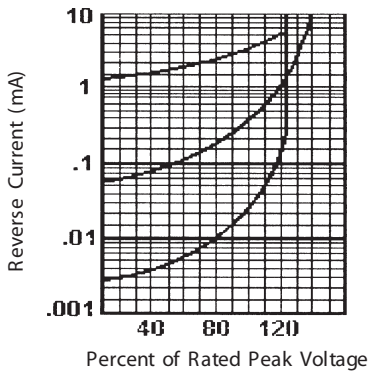
Forward Current Derating Curve



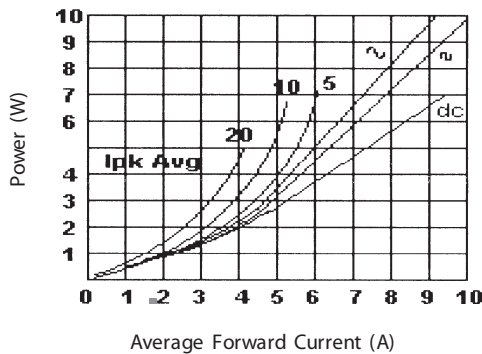
Forward Current Derating Curve



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 mS, 2% Duty Cycle.