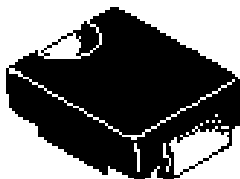
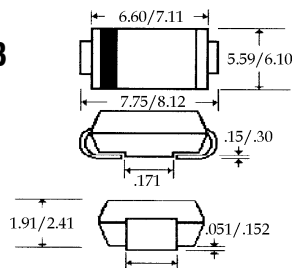


Description



Mechanical Dimensions

**DO-214AB
(SMC)**



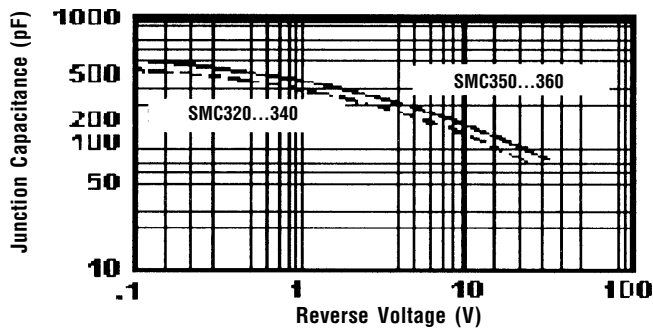
(Dimensions in mm)

Features

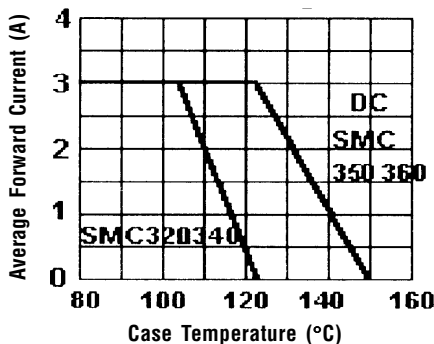
- **EXTREMELY LOW V_F**
- **LOW STORED CHARGE**
- **LOW POWER LOSS – HIGH EFFICIENCY**
- **MAJORITY CARRIER CONDUCTION**
- **MEETS UL SPECIFICATION 94V-0**

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

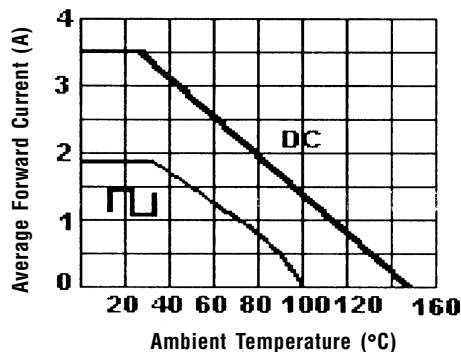
Typical Junction Capacitance



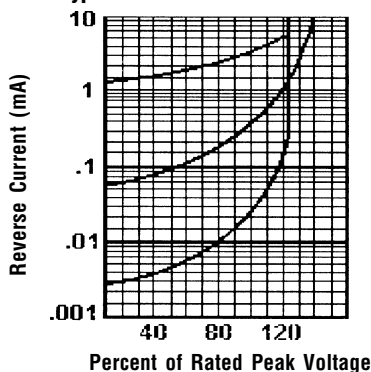
Forward Current Derating Curve



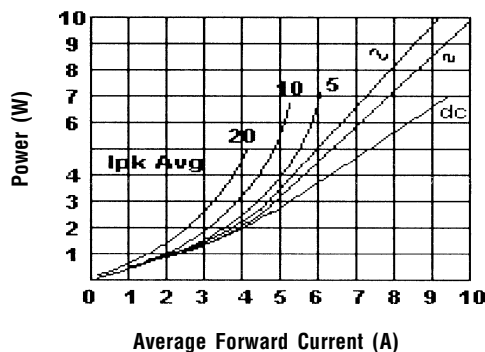
Forward Current Derating Curve



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.