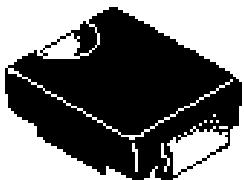


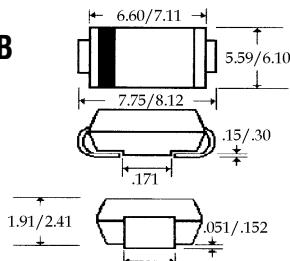
## Description



# 3.0 Amp SURFACE MOUNT PLASTIC SILICON DIODES

## Mechanical Dimensions

**DO-214AB  
(SMC)**



(Dimensions in mm)

## Features

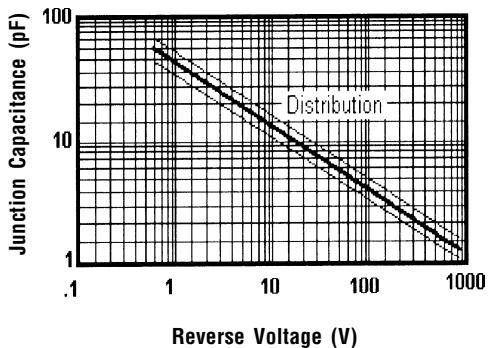
- **LOW COST**
- **HIGH CURRENT CAPABILITY**
- **HIGH SURGE CAPABILITY**
- **LOW FORWARD VOLTAGE WITH LOW LEAKAGE CURRENT**
- **MEETS UL SPECIFICATION 94V-0**

	<b>SMC31 . . . 310 Series</b>						<b>Units</b>
<b>Maximum Ratings</b>	<b>SMC31</b>	<b>SMC32</b>	<b>SMC34</b>	<b>SMC36</b>	<b>SMC38</b>	<b>SMC310</b>	
Peak Repetitive Reverse Voltage... $V_{RRM}$	100	200	400	600	800	1000	Volts
RMS Reverse Voltage... $V_{R(rms)}$	70	140	280	420	560	700	Volts
DC Blocking Voltage... $V_{DC}$	100	200	400	600	800	1000	Volts
Average Forward Rectified Current... $I_{F(av)}$	.....	3.0	.....	.....	.....	.....	Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$	.....	200	.....	.....	.....	.....	Amps
Operating & Storage Temperature Range... $T_j, T_{STRG}$	.....	-65 to 175	.....	.....	.....	.....	°C
<b>Electrical Characteristics</b>							
Maximum Forward Voltage @ 3.0 A... $V_F$	.....	1.1	.....	.....	.....	.....	Volts
Maximum DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage	$T_c = 25^\circ C$	.....	5.0	.....	.....	.....	$\mu$ Amps
	$T_c = 75^\circ C$	.....	100	.....	.....	.....	$\mu$ Amps
Typical Junction Capacitance... $C_J$ ( <i>Note 1</i> )	.....	50	.....	.....	.....	.....	pF
Typical Thermal Resistance... $R_{\theta JC}$	.....	28	.....	.....	.....	.....	°C / W

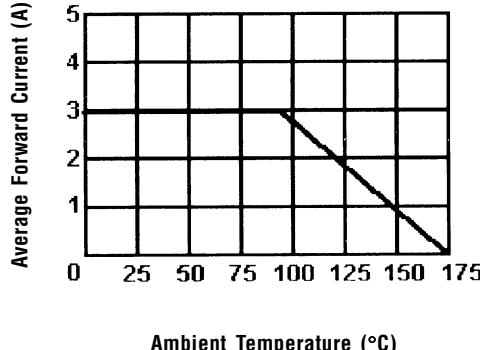
# 3.0 Amp SURFACE MOUNT PLASTIC SILICON DIODES

**SMC31 ... 310 Series**

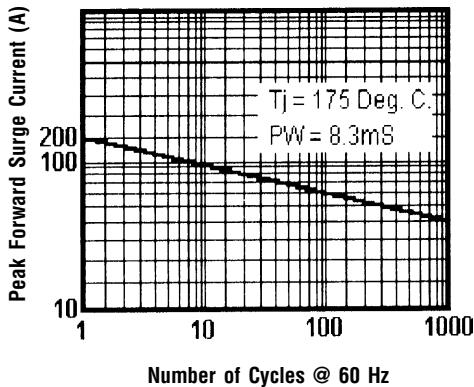
Typical Junction Capacitance



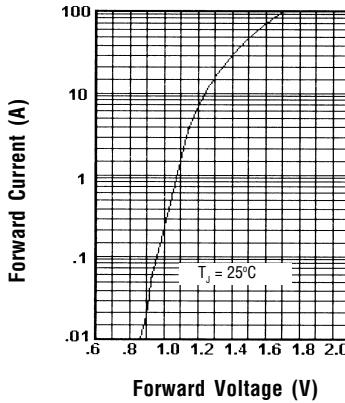
Forward Current Derating Curve



Peak Forward Surge Current



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.