

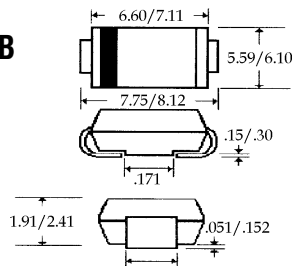
3.0 Amp SURFACE MOUNT PLASTIC SILICON DIODES

Description



Mechanical Dimensions

DO-214AB
(SMC)



(Dimensions in mm)

Features

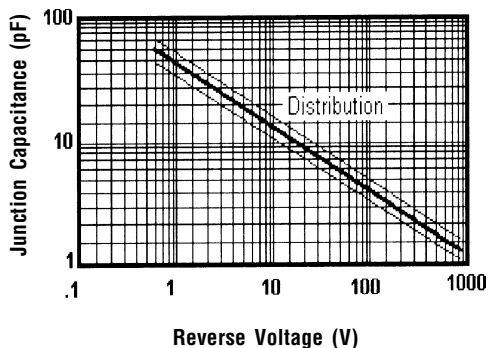
- LOW COST
- HIGH CURRENT CAPABILITY
- HIGH SURGE CAPABILITY
- LOW FORWARD VOLTAGE WITH LOW LEAKAGE CURRENT
- MEETS UL SPECIFICATION 94V-0

SMC31 . . . 310 Series							Units
Maximum Ratings	SMC31	SMC32	SMC34	SMC36	SMC38	SMC310	
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
Electrical Characteristics							
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			μAmps
	$T_C = 75^{\circ}C$			100			μAmps
Typical Junction Capacitance... C_J (Note 1) 50						pF
Typical Thermal Resistance... $R_{\theta JC}$ 28						°C / W

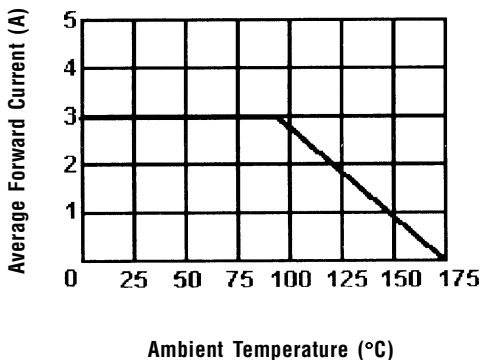
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SMC31 ... 310 Series

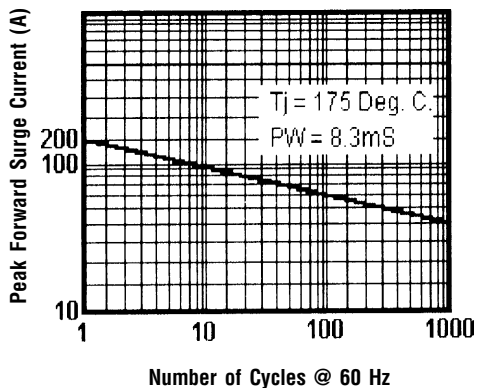
Typical Junction Capacitance



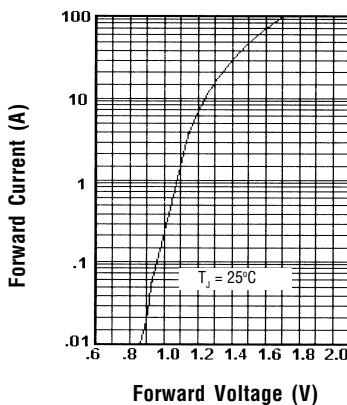
Forward Current Derating Curve



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.