

# 1.0 Amp SCHOTTKY BARRIER RECTIFIERS

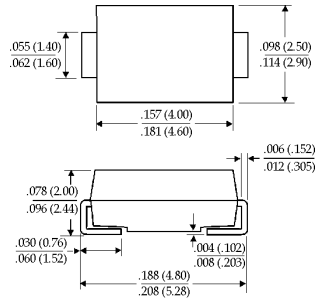
## Description

## Mechanical Dimensions

**SMA120...1100 Series**



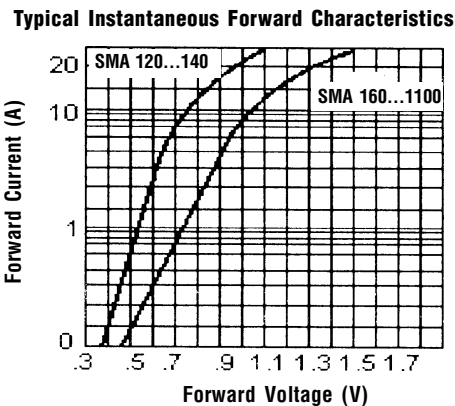
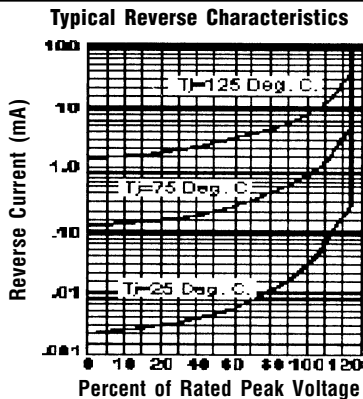
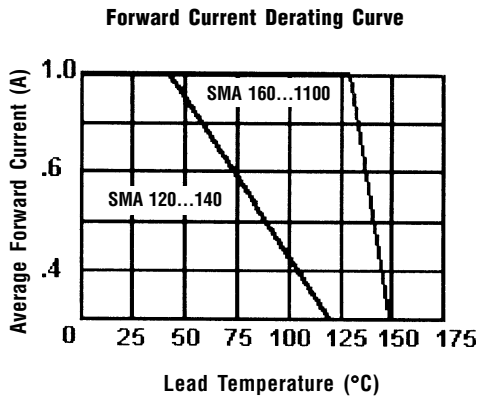
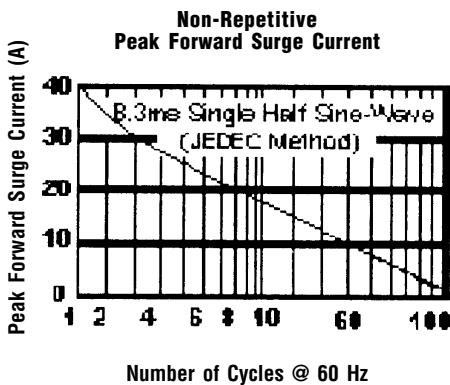
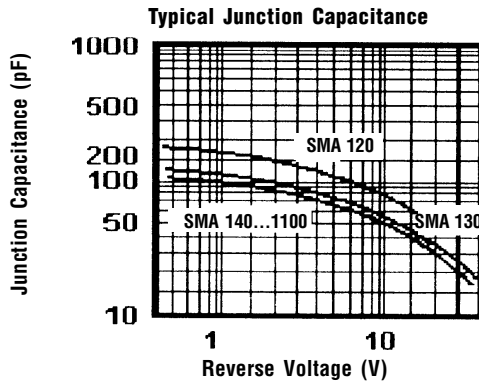
**DO-214AC (SMA)**



### Features

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

<b>SMA120 . . . 1100 Series</b>						<b>Units</b>
<b>Maximum Ratings</b>	<b>SMA120</b>	<b>SMA130</b>	<b>SMA140</b>	<b>SMA160</b>	<b>SMA1100</b>	
Peak Repetitive Reverse Voltage... $V_{RRM}$	20	30	40	60	100	Volts
Working Peak Reverse Voltage... $V_{RWM}$	20	30	40	60	100	Volts
DC Blocking Voltage... $V_{DC}$	20	30	40	60	100	Volts
RMS Reverse Voltage... $V_{R(rms)}$	14	21	28	42	70	Volts
Average Forward Rectified Current... $I_{F(av)}$	..... 1.0 .....					Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$	< ..... 30 ..... >					50 Amps
Operating & Storage Temperature Range... $T_J, T_{STRG}$	..... -65 to 125 .....					°C
<b>Electrical Characteristics</b>						
Maximum Forward Voltage... $V_F$ (Note 2)	.45	.50	.55	.70	.85	Volts
Maximum DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage	..... 1.0 ..... ..... 10 .....					mAmps mAmps
	$T_C = 25^\circ C$ $T_C = 100^\circ C$					
Typical Junction Capacitance... $C_j$ (Note 1)	110	70	70	70	70	pF
Typical Thermal Resistance... $R_{\theta JC}$	..... 80 .....					°C / W



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. Pulse Test: Pulse width = 300  $\mu$ S. DutyCycle = 2%.