

# 1.0 Amp SURFACE MOUNT PLASTIC SILICON DIODES

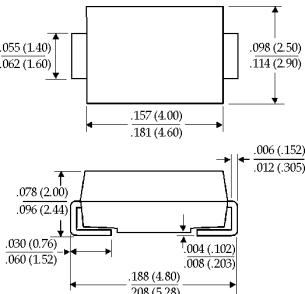
**SMA11...110 Series**

## Description



## Mechanical Dimensions

**DO-214AC  
(SMA)**

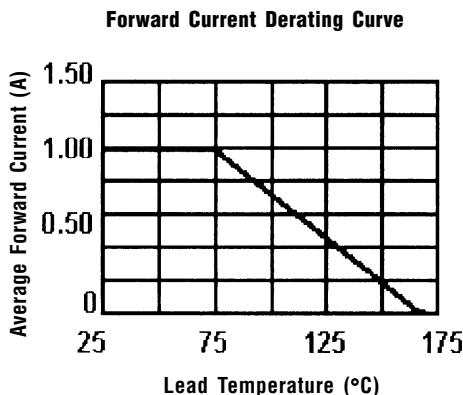
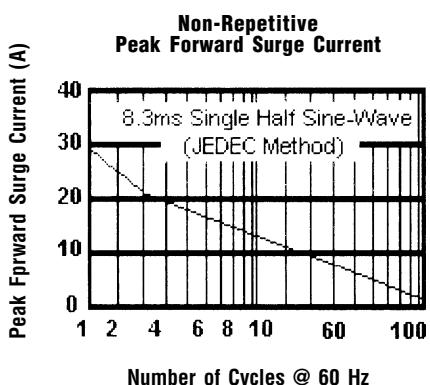
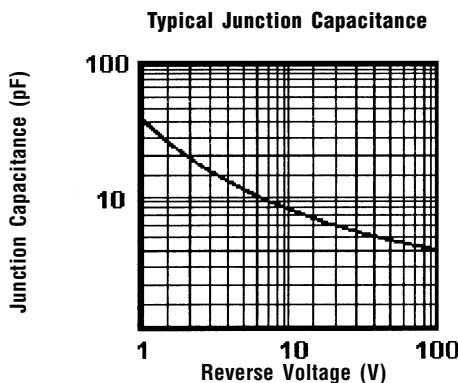


Dimensions in inches and (millimeters)

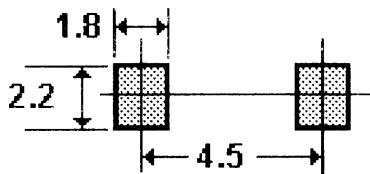
## Features

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

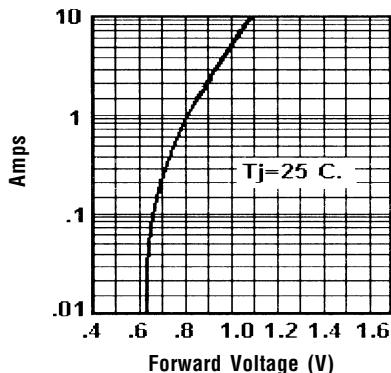
<b>SMA11 . . . 110 Series</b>						<b>Units</b>
<b>Maximum Ratings</b>	<b>SMA11</b>	<b>SMA12</b>	<b>SMA14</b>	<b>SMA16</b>	<b>SMA18</b>	<b>SMA110</b>
Peak Repetitive Reverse Voltage... $V_{RRM}$	100	200	400	600	800	1000
RMS Reverse Voltage... $V_{R(rms)}$	70	140	280	420	560	700
DC Blocking Voltage... $V_{DC}$	100	200	400	600	800	1000
Average Forward Rectified Current... $I_{F(av)}$	.....	.....	1.0	.....	.....	Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$	.....	.....	30	.....	.....	Amps
Operating & Storage Temperature Range... $T_J$ , $T_{STRG}$	.....	.....	-65 to 175	.....	.....	°C
<b>Electrical Characteristics</b>						
Maximum Forward Voltage @ 1.0A... $V_F$	.....	.....	1.1	.....	.....	Volts
Maximum Full Load Reverse Current... $I_R(av)$	.....	.....	30	.....	.....	µAmps
Maximum DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage	$T_C = 25^\circ C$	.....	5.0	.....	.....	µAmps
	$T_C = 75^\circ C$	.....	50	.....	.....	µAmps
Typical Junction Capacitance... $C_J$ ( <i>Note 1</i> )	.....	.....	30	.....	.....	pF



**Recommended Soldering Pad Layout**



**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.