



1.0 Amp SURFACE MOUNT PLASTIC SILICON DIODES

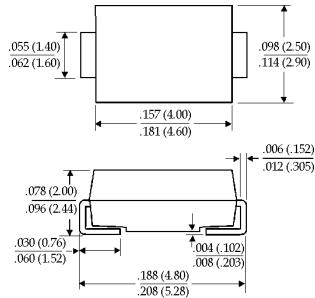
SMA11 ... 110 Series

Description



Mechanical Dimensions

DO-214AC (SMA)



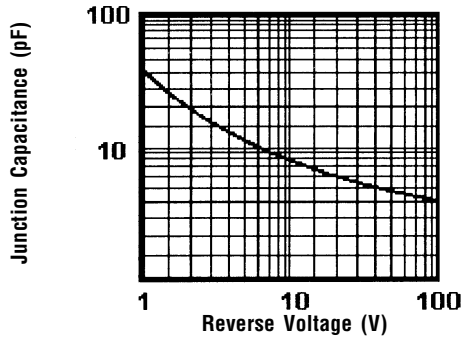
Dimensions in inches and (millimeters)

Features

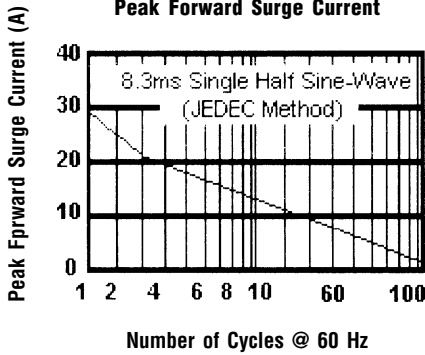
- **LOW COST**
- **HIGH CURRENT CAPABILITY**
- **HIGH SURGE CAPABILITY**
- **LOW FORWARD VOLTAGE WITH LOW LEAKAGE CURRENT**
- **MEETS UL SPECIFICATION 94V-0**

SMA11 ... 110 Series							Units
Maximum Ratings	SMA11	SMA12	SMA14	SMA16	SMA18	SMA110	
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... $I_{F(av)}$				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
Electrical Characteristics							
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 (Note 1)				30			pF

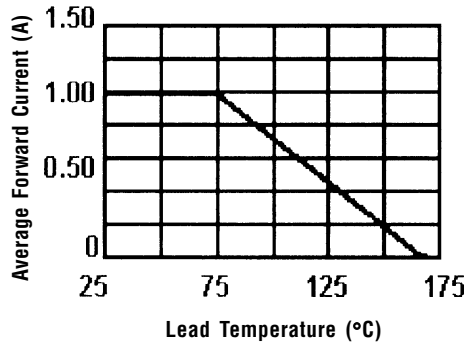
Typical Junction Capacitance



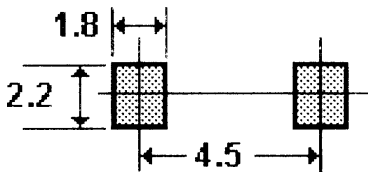
Non-Repetitive
Peak Forward Surge Current



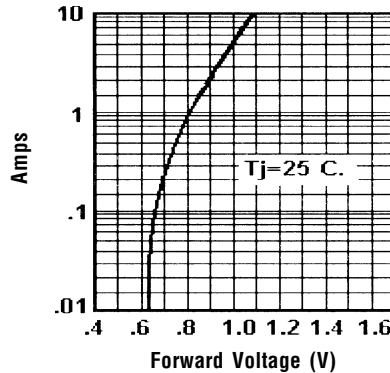
Forward Current Derating Curve



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.