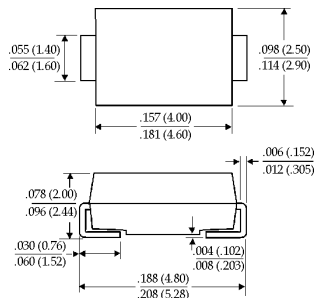


1.0 Amp SCHOTTKY BARRIER RECTIFIERS

Mechanical Dimensions

D0-214AC
(SMA)



Dimensions in inches and (millimeters)

Features

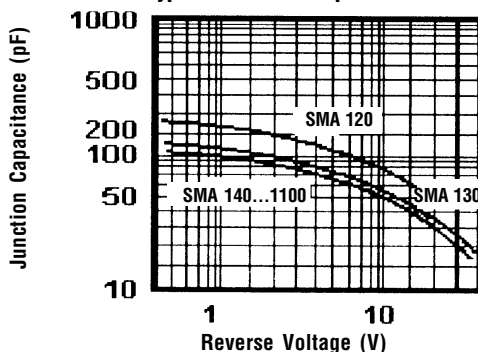
- EXTREMELY LOW V_F
- LOW STORED CHARGE
- LOW POWER LOSS - HIGH EFFICIENCY
- MAJORITY CARRIER CONDUCTION
- MEETS UL SPECIFICATION 94V-0

SMA120 . . . 1100 Series						Units
Maximum Ratings	SMA120	SMA130	SMA140	SMA160	SMA1100	
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 >					Amps
Operating & Storage Temperature Range... T_J, T_{STRG}	-65 to 125					°C
Electrical Characteristics						
Maximum Forward Voltage... V_F (Note 2)	.45	.50	.55	.70	.85	Volts
Maximum DC Reverse Current... I_R @ Rated DC Blocking Voltage $T_C = 25^{\circ}C$ $T_C = 100^{\circ}C$				1.0 10	mAmps mAmps	
Typical Junction Capacitance... C_J (Note 1)	110	70	70	70	70	pF
Typical Thermal Resistance... $R_{\theta JC}$	80					°C / W

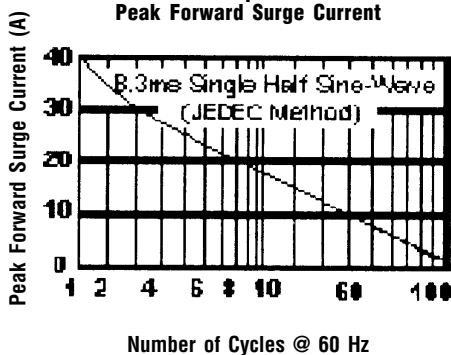
1.0 Amp SCHOTTKY BARRIER RECTIFIERS

SMA120...1100 Series

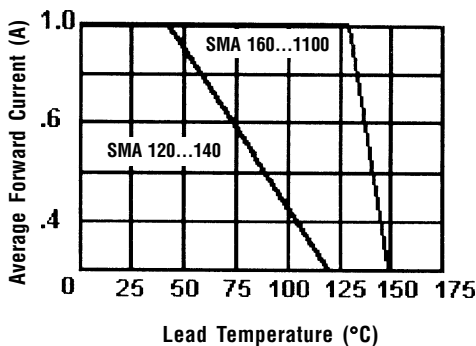
Typical Junction Capacitance



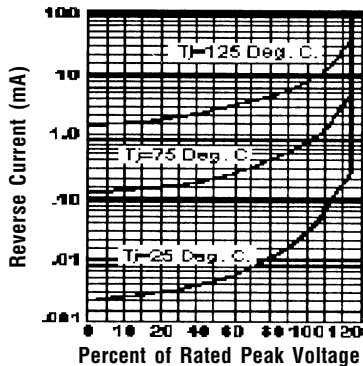
Non-Repetitive
Peak Forward Surge Current



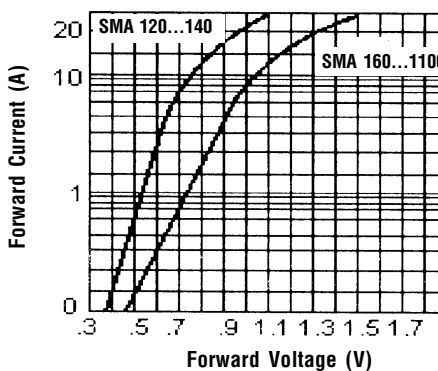
Forward Current Derating Curve



Typical Reverse Characteristics



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.
2. Pulse Test: Pulse width = 300 μ S. DutyCycle = 2%.