

### Surface Mount Schottky Barrier Rectifiers

**(Pb)** Lead(Pb)-Free

#### Features:

- \*Schottky Barrier Chip
- \*Ideally Suited for Automatic Assembly
- \*Low Power Loss, High Efficiency
- \*Surge Overload Rating to 30A Peak
- \*For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Application

**REVERSE VOLTAGE  
70 TO 100 VOLTS  
FORWARD CURRENT  
1.0 AMPERE**



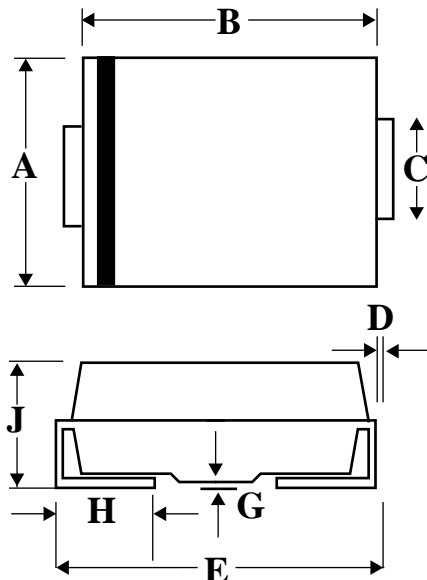
**SMA(DO-214AC)**

#### Mechanical Data

- \*Case : Molded Plastic
- \*Plastic Material: UL Flammability Classification Rating 94V-0
- \*Terminals: Solder Plated Terminal Solderable per MIL-STD-202, Method 208
- \*Polarity: Cathode Band
- \*Mounting Position: Any
- \*Weight: 0.064 grams(approx)

### SMA Outline Dimension

Unit:mm



SMA		
Dim	Min	Max
<b>A</b>	2.20	2.92
<b>B</b>	4.00	4.60
<b>C</b>	1.27	1.63
<b>D</b>	0.15	0.31
<b>E</b>	4.48	5.59
<b>G</b>	0.10	0.20
<b>H</b>	0.76	1.52
<b>J</b>	1.70	2.62

**Maximum Ratings and Electrical Characteristics**

Rating 25 °C Ambient Temperature Unless Otherwise Specified.

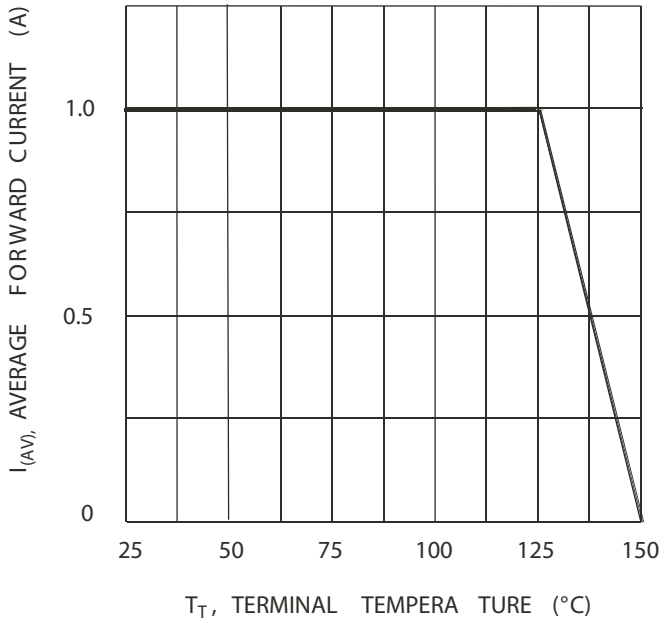
Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

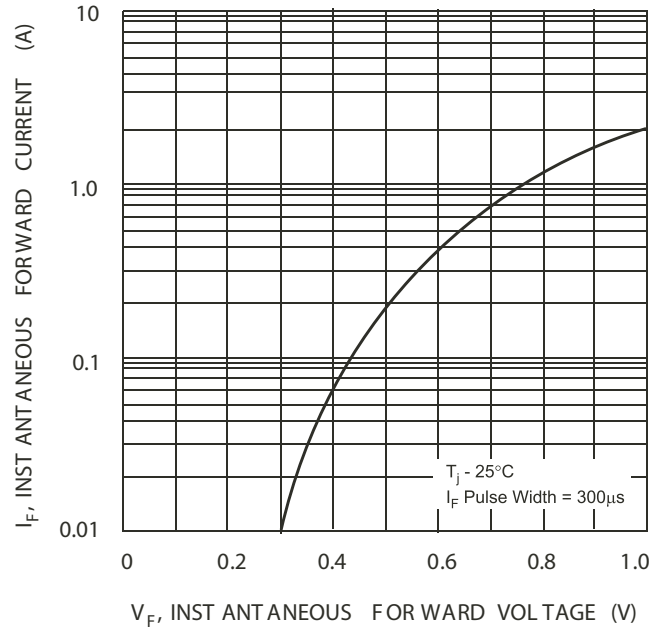
Characteristic	Symbol	B170	B180	B190	B1100	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	70	80	90	100	V
Maximum RMS Voltage	VRMS	49	56	63	70	V
Maximum DC Blocking Voltage	VDC	70	80	90	100	V
Maximum Average Forward Rectified Current @TC=125°C	IF(AV)	1.0				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	30				A
Maximum Instantaneous At 1.0A DC	VF	0.79				V
Maximum DC Reverse Current @Tj=25 °C At Rated DC Blocking Voltage @Tj=100 °C	IR	0.5 50				mA
Typical Junction Capacitance (Note 1)	CJ	80				Pf
Typical Thermal Resistance (Note 2)	RθJL	30				°C/W
Operating Temperature Range	TJ	-55 to+125				°C
Storage Temperature Range	TSTG	-55 to+150				°C

NOTES:1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.

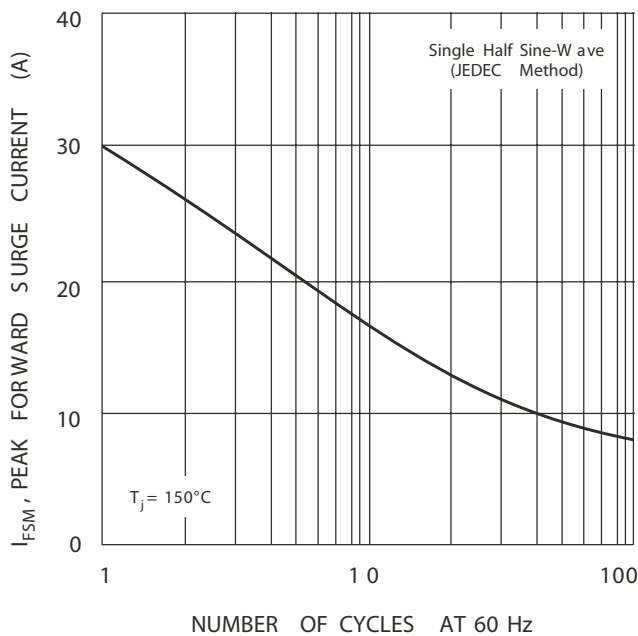
2.Thermal Resistance Junction to case.



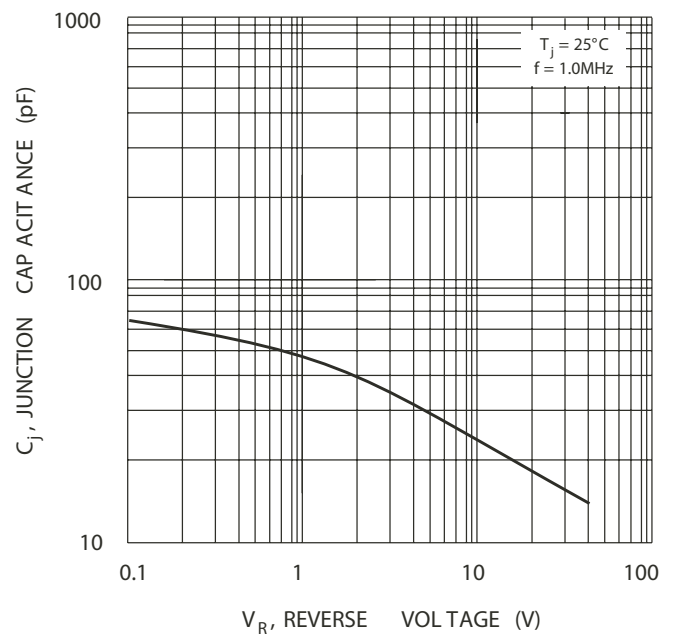
**FIG.1 Forward Current Derating Curve**



**FIG.2 Typical Forward Characteristics**



**FIG.3 Max Non-Repetitive Peak Forward Surge Current**



**FIG.4 Typical Junction Capacitance**