

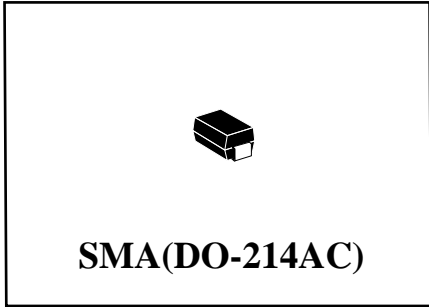
## Surface Mount Schottky Barrier Rectifiers

\* "G" Lead(Pb)-Free

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

### Features:

- \*For Surface Mount Application
- \*Metal-Semiconductor Junction With Guardring
- \*Epitaxial Construction
- \*Very Low Forward Voltage Drop
- \*High Current Capability
- \*Plastic Meterial Has UL Flammability Classification 94V-0
- \*For Use In Low , And Polarity Protection Applications
- \* "G" Lead(Pb)-Free(External Plating)

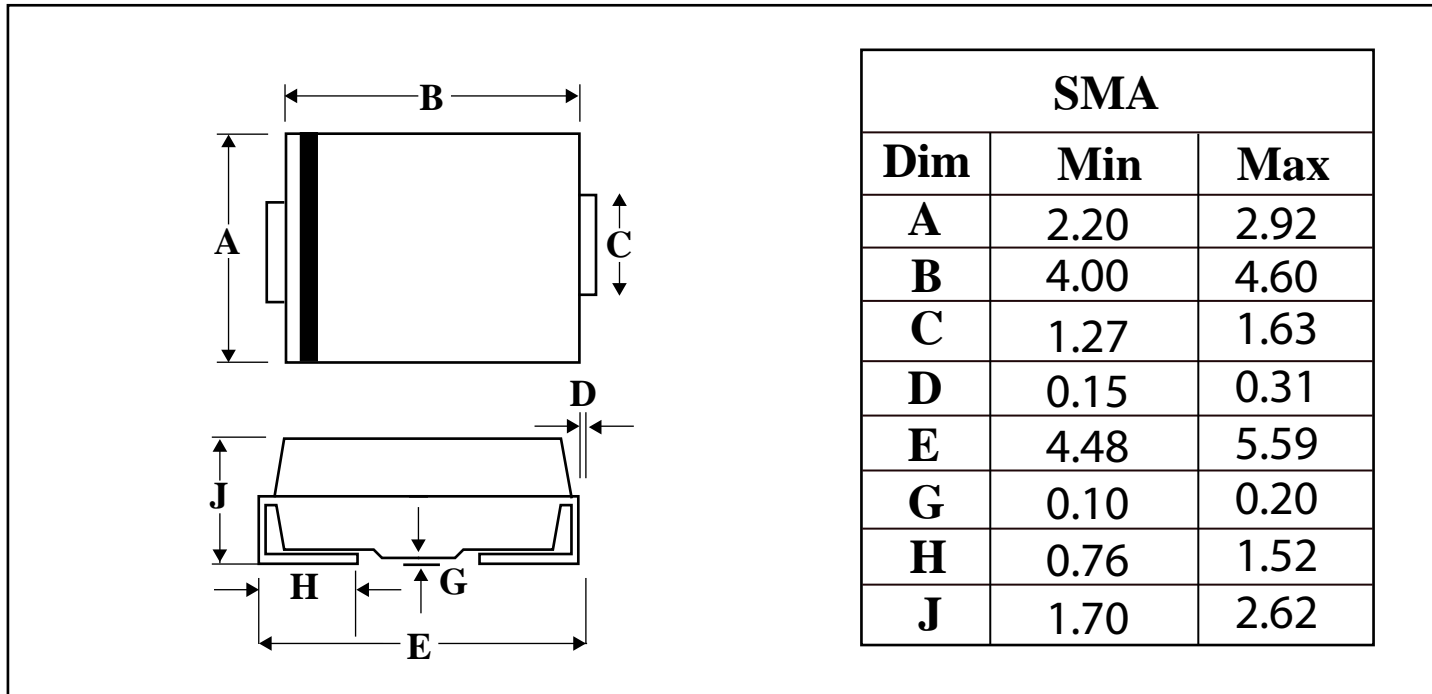


### Mechanical Data

- \*Case : Molded Plastic
- \*Polarity :Indicated by cathode band
- \*Weight : 0.002 Ounce ,0.064 grams

## SMA Outline Dimension

Unit:mm



**Maximum Ratings and Electrical Characteristics**

Rating 25°C Ambient Temperature Unless Otherwise Specified.

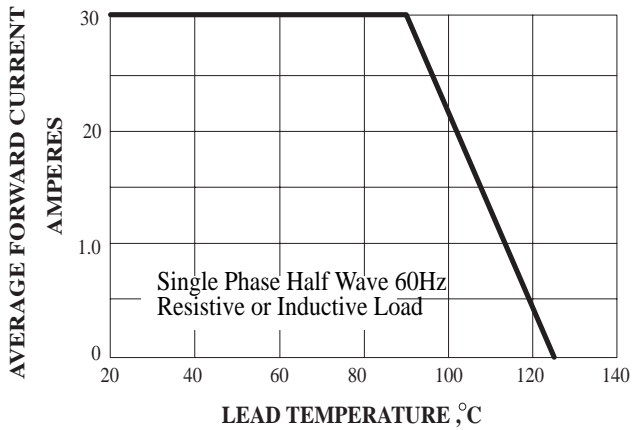
Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

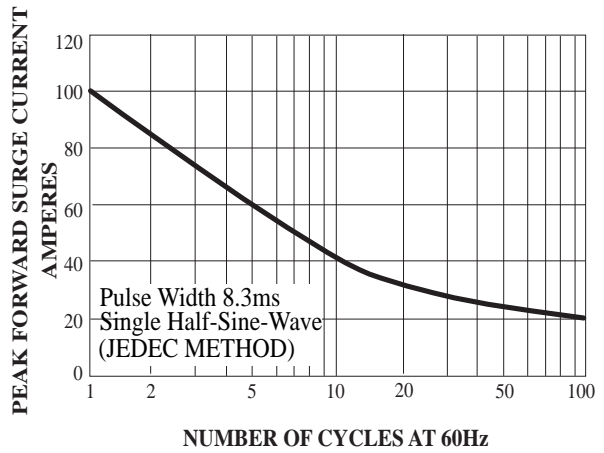
Characteristic	Symbol	B370A	B380A	B390A	B3100A	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	70	80	90	100	V
Maximum RMS Voltage	$V_{RMS}$	49	56	63	70	V
Maximum DC Blocking Voltage	$V_{DC}$	70	80	90	100	V
Maximum Average Forward Rectified Current @ $T_c=90^\circ\text{C}$	$I_{F(AV)}$	3.0				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	100				A
Maximum Instantaneous At 3.0A DC	$V_F$	0.85				V
Maximum DC Reverse Current @ $T_j=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_j=100^\circ\text{C}$	$I_R$	0.5 20				mA
Typical Junction Capacitance (Note 1)	$C_J$	100				PF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	10				$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to+125				$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to+150				$^\circ\text{C}$

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

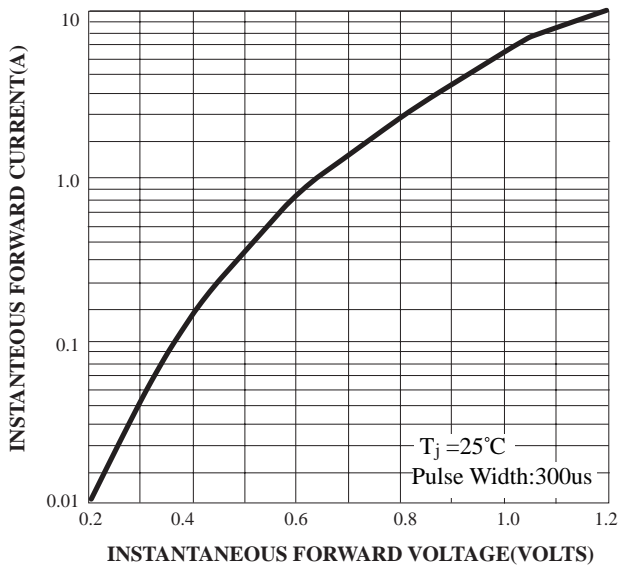
2.Thermal Resistance Junction to case.



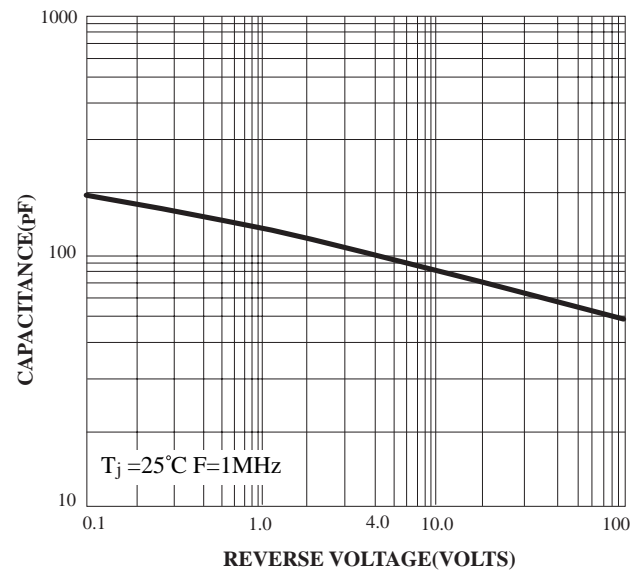
**FIG.1 Forward Current Derating Curve**



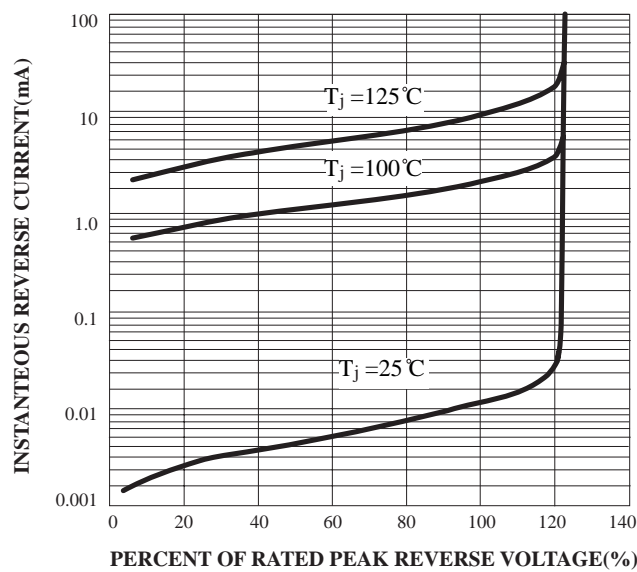
**FIG.2 Maximum Non-Repetitive Surge Current**



**FIG.3 Typical Forward Characteristics**



**FIG.4 Typical Junction Capacitance**



**FIG.5 Typical Reverse Characteristics**