

## Surface Mount Schottky Barrier Rectifiers

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

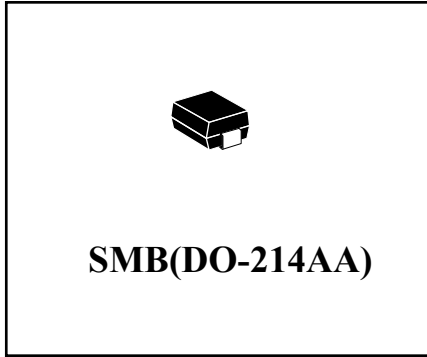
### Feature:

- \*For Surface Mount Application
- \*Metal-Semiconductor Junction With Guardring
- \*Epitaxial Construction
- \*Very Low Forward Voltage Drop
- \*High Current Capability
- \*Plastic Material Has UL Flammability Classification 94V-0
- \*For Use In Low , And Polarity Protection Applications

### Mechanical Data

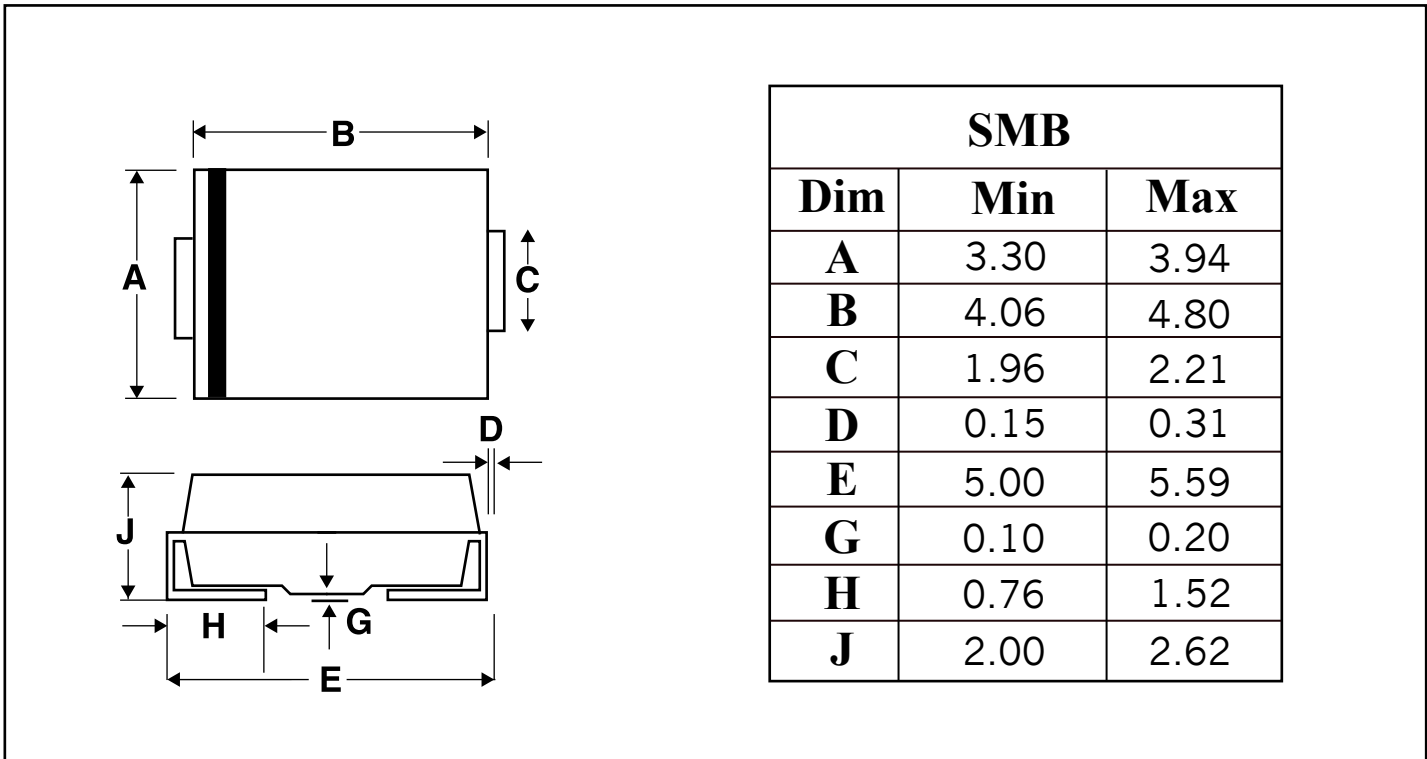
- \*Case : Molded Plastic
- \*Polarity :Indicated by cathode band
- \*Weight : 0.003 Ounce ,0.093 grams

**REVERSE VOLTAGE  
20 TO 60 VOLTS  
FORWARD CURRENT  
2.0 AMPERE**



## SMB 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.

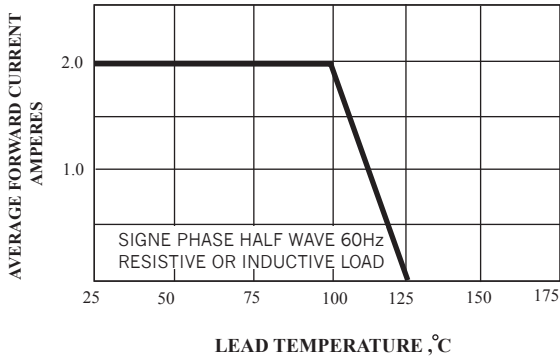
For Capacitive Load, Derate Current by 20%.

Characteristics	Symbol	B220	B230	B240	B250	B260	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	V
Maximum RMS Voltage	VRMS	14	21	28	35	42	V
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	V
Maximum Average Forward Rectified Current @TC=100°C	IF(AV)	2.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	50					A
Maximum Instantaneous At 2.0A DC	VF	0.5			0.7		V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=100°C	IR	0.5 20					mA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	200					PF
Typical Thermal Resistance (Note 2)	R <sub>θJL</sub>	15					°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to+125					°C
Storage Temperature Range	TSTG	-55 to+150					°C

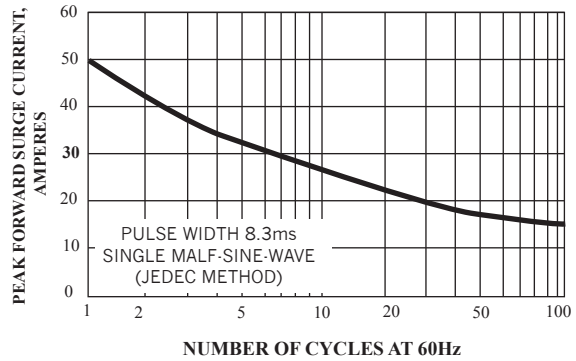
NOTES:1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.

2.Thermal Resistance Junction to case.

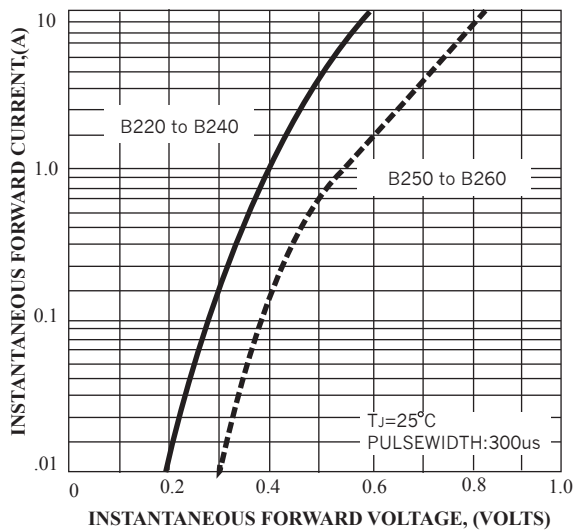
**FIG.1 FORDWARD CURRENT DERATING CURVE**



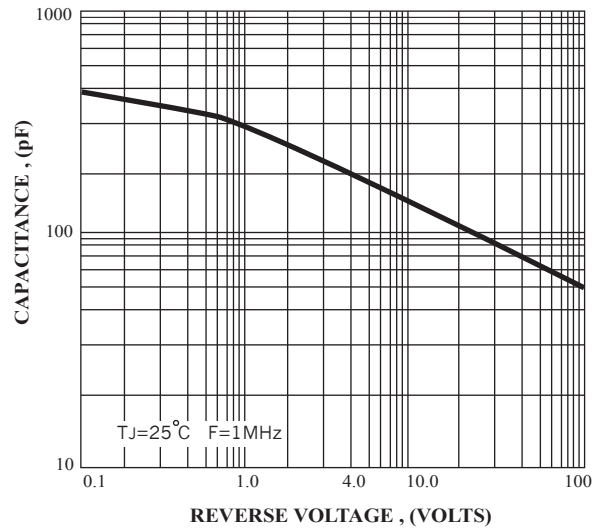
**FIG.2 MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3 TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 TYPICAL JUNCTION CAPACITANCE**



**FIG.5 TYPICAL REVERSE CHARACTERISTICS**

