



**B520 thru B560**

**Surface Mount Schottky Barrier Rectifiers**

**Features:**

- \*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

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



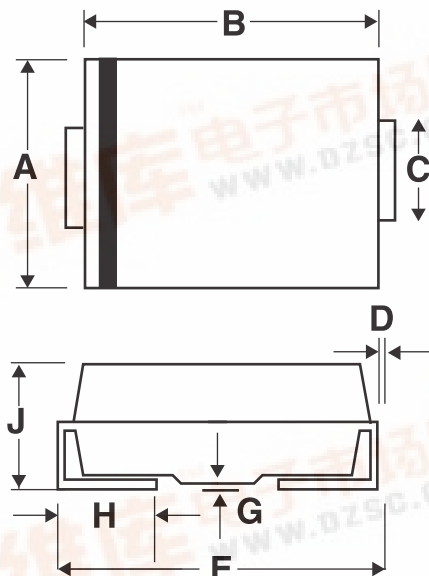
**SMC(DO-214AB)**

**Mechanical Data:**

- \*Case : Molded Plastic
- \*Polarity :Indicated by cathode band
- \*Weight : 0.007 Ounce ,0.21 grams

**SMC Outline Dimension**

Unit:mm



SMC		
Dim	Min	Max
<b>A</b>	5.59	6.22
<b>B</b>	6.60	7.11
<b>C</b>	2.75	3.18
<b>D</b>	0.15	0.31
<b>E</b>	7.75	8.13
<b>G</b>	0.10	0.20
<b>H</b>	0.76	1.52
<b>J</b>	2.00	2.62

**Maximum Ratings and Electrical Characteristics**

Rating 25°C Ambient Temperature Unless Otherwise Specified.

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

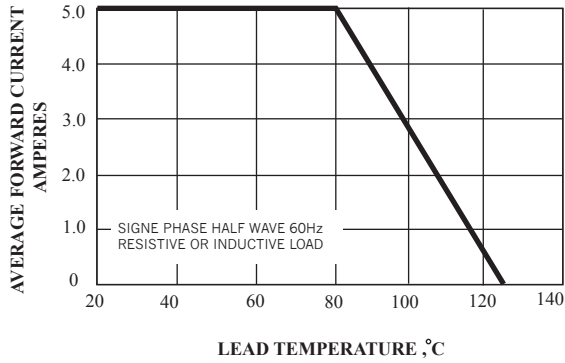
For Capacitive Load, Derate Current by 20%.

<b>Characteristics</b>	<b>Symbol</b>	<b>B520</b>	<b>B530</b>	<b>B540</b>	<b>B550</b>	<b>B560</b>	<b>Unit</b>
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=80°C	I <sub>F</sub> (AV)	5.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	175					A
Maximum Instantaneous At 5.0A DC	VF	0.55		0.7		V	
Maximum DC Reverse Current @T <sub>j</sub> =25°C At Rated DC Blocking Voltage @T <sub>j</sub> =100°C	IR	0.5 20					mA
Typical Junction Capacitance (Note 1)	CJ	300					PF
Typical Thermal Resistance (Note 2)	R <sub>θJL</sub>	10					°C/W
Operating Temperature Range	TJ	-55 to+125					°C
Storage Temperature Range	TSTG	-55 to+150					°C

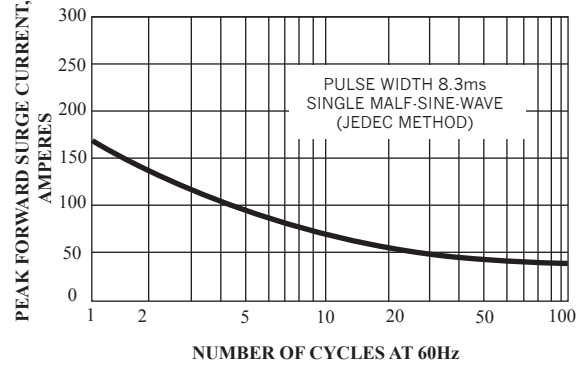
NOTES:1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.

2.Thermal Resistance Junction to case.

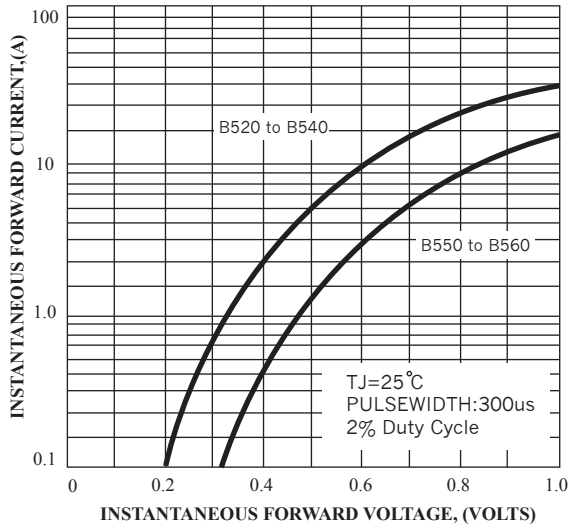
**FIG.1 FORDWARD CURRENT DERATING CURVE**



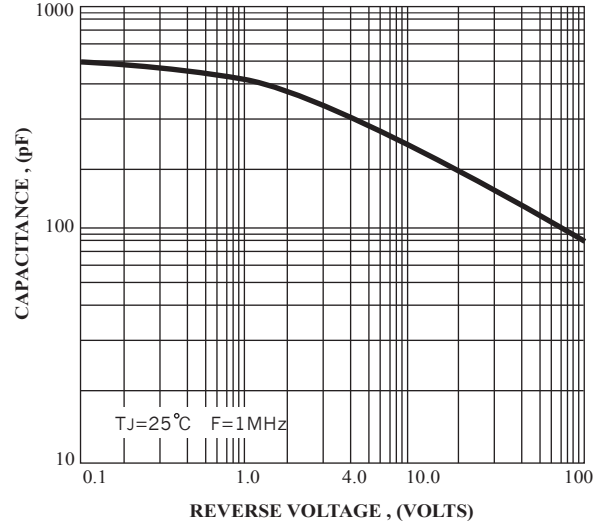
**FIG.2 MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3 TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 TYPICAL JUNCTION CAPACITANCE**



**FIG.5 TYPICAL REVERSE CHARACTERISTICS**

