

### 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 : 0.231 grams

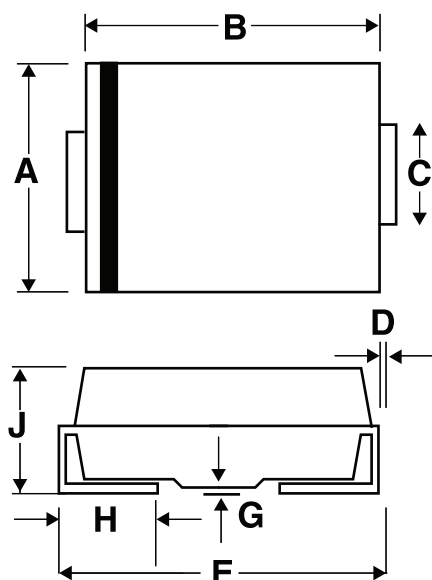
**REVERSE VOLTAGE**  
**20 TO 200 VOLTS**  
**FORWARD CURRENT**  
**3.0 AMPERE**



**SMC(DO-214AB)**

### SMC Outline Dimension

Unit:mm



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

## 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%.

### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	B320	B330	B340	B350	B360	B380	B3100	B3150	B3200	UNIT	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current	$I_F$	3.0									A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	80.0									A	
Maximum instantaneous $I_F=3A$ @ 25°C	$V_F$	0.50			0.70		0.85		0.87	0.90	V	
Maximum DC reverse current @ TA=25°C at rated DC blocking voltage @ TA=100°C	$I_R$	0.5					0.2					mA
		10.0					5.0					
Typical junction capacitance	$C_J$	180			150		110		100	80	pF	
Typical thermal resistance	$R_{\theta JA}$	70									°C/W	
	$R_{\theta JC}$	30										
Operating temperature range	$T_J$	-55 to +125									°C	
Storage temperature range	$T_{STG}$	-55 to +150									°C	

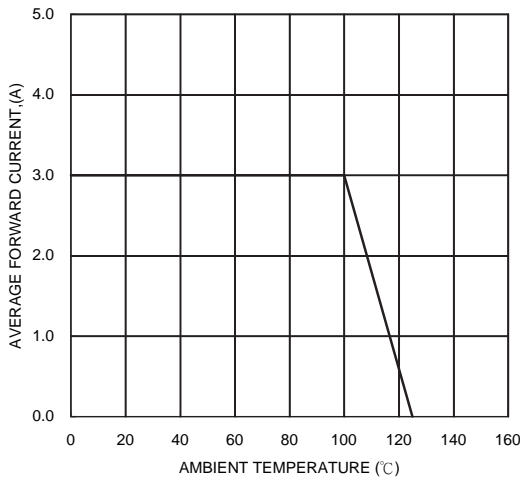


FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

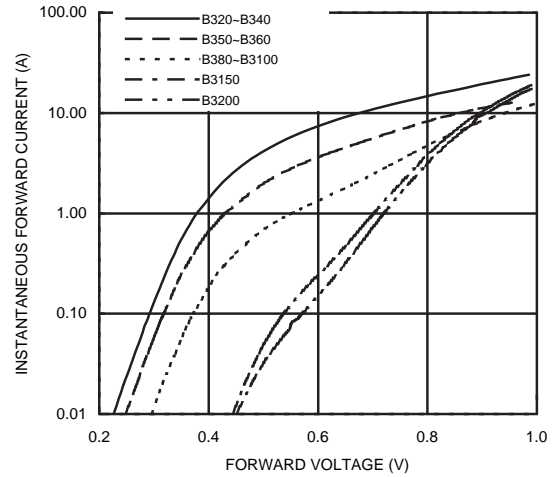


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

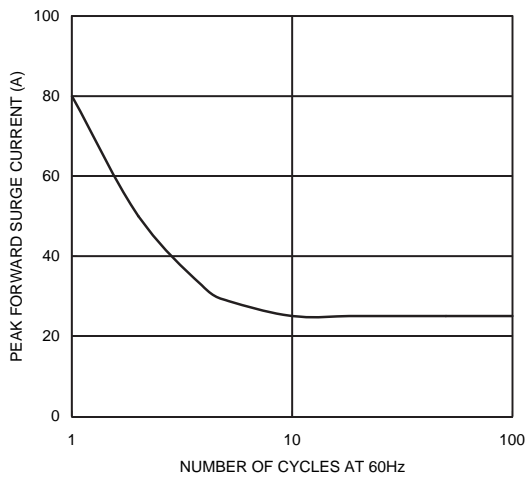


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

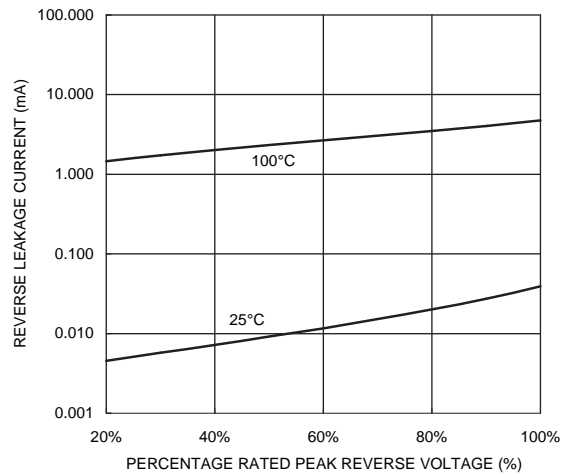


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

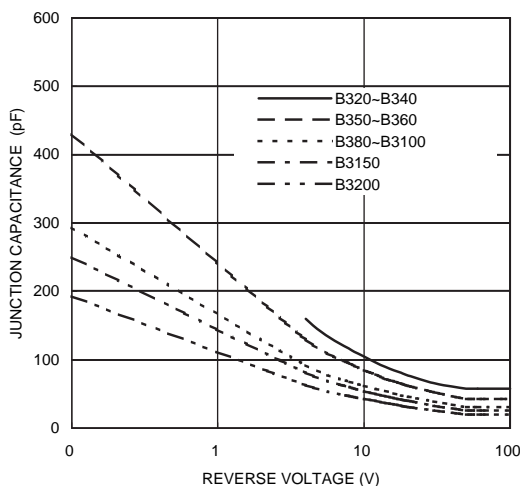


FIG. 5-TYPICAL JUNCTION CAPACITANCE