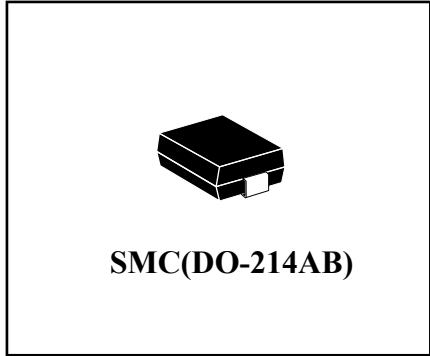


## Surface Mount Schottky Barrier Rectifiers

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

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



### Features:

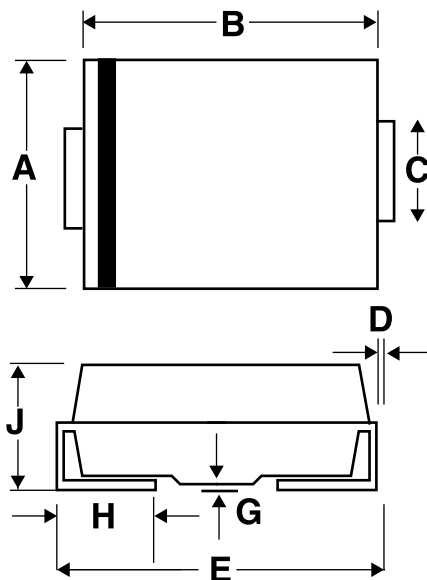
- \*For Surface Mount Application
- \*Metal-Semiconductor Junction With Guardring
- \*Epitaxial Construction
- \*Very Low Forward Voltage Drop
- \*High Current Capability
- \*Plastic Material Has UL Flammability Classification 94V-0
- \*For Use In Low , And Polarity Protection Applications

### Mechanical Data

- \*Case : Molded Plastic
- \*Polarity :Indicated by cathode band
- \*Weight : 0.007 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%.

Characteristic	Symbol	B370	B380	B390	B3100	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=90°C	IF(AV)	3.0				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	100				A
Maximum Instantaneous At 3.0A DC	VF	0.85				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)	CJ	100				P <sub>F</sub>
Typical Thermal Resistance (Note 2)	RθJL	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 - FORWARD CURRENT DERATING CURVE

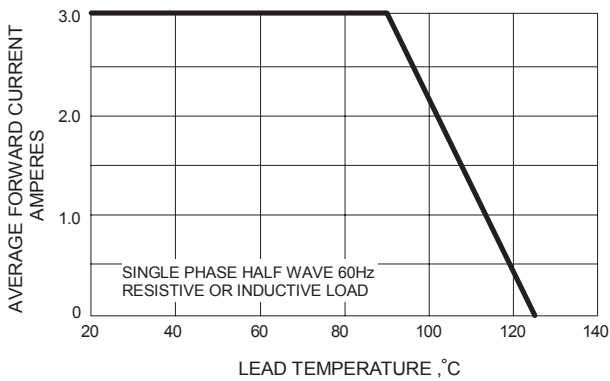


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

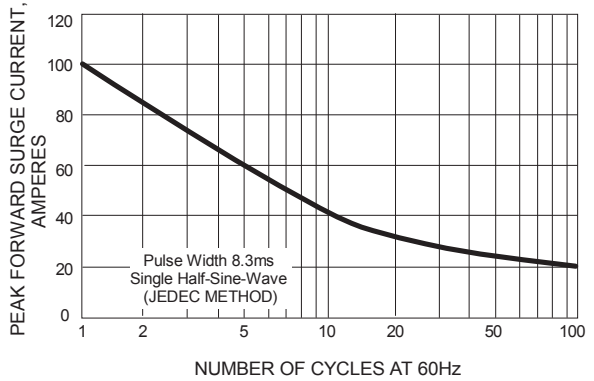


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

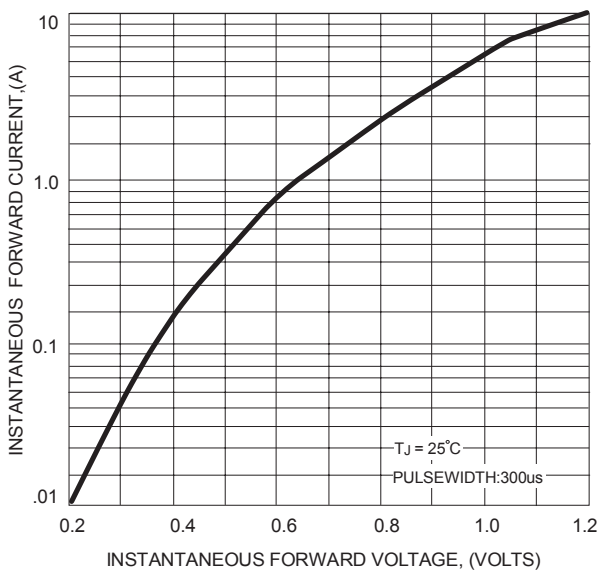


FIG.4 - TYPICAL JUNCTION CAPACITANCE

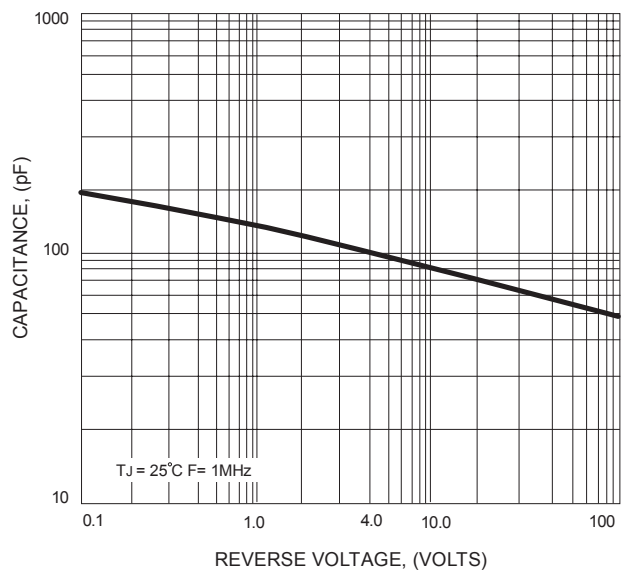


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

