

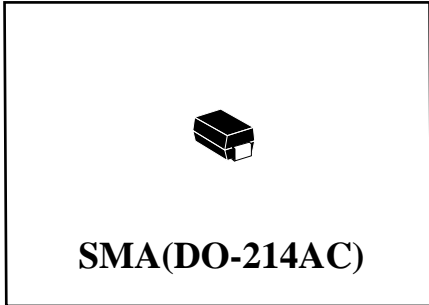
Surface Mount Schottky Barrier Rectifiers

* "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

The diagram shows two views of the SMA component. The top view shows a rectangular component with a cathode band on the left side. Dimensions A, B, and C are indicated. The side view shows the component's profile with dimensions D, E, G, H, and J. Dimension A is the height of the component. Dimension B is the width. Dimension C is the height of the cathode band. Dimension D is the thickness of the component. Dimension E is the length of the component. Dimension G is the width of the cathode band. Dimension H is the width of the component at the base. Dimension J is the height of the component at the base.

SMA		
Dim	Min	Max
A	2.20	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.48	5.59
G	0.10	0.20
H	0.76	1.52
J	1.70	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	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.

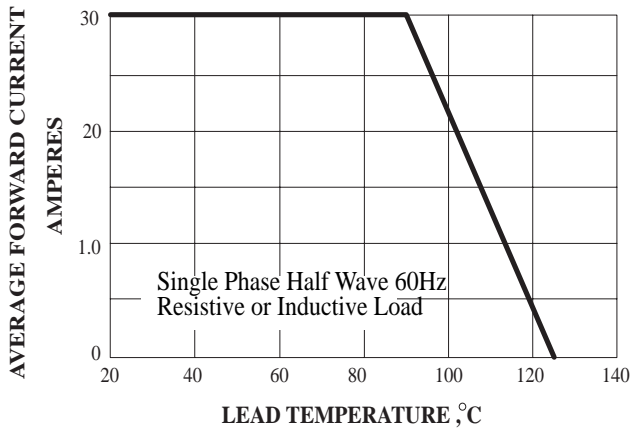


FIG.1 Forward Current Derating Curve

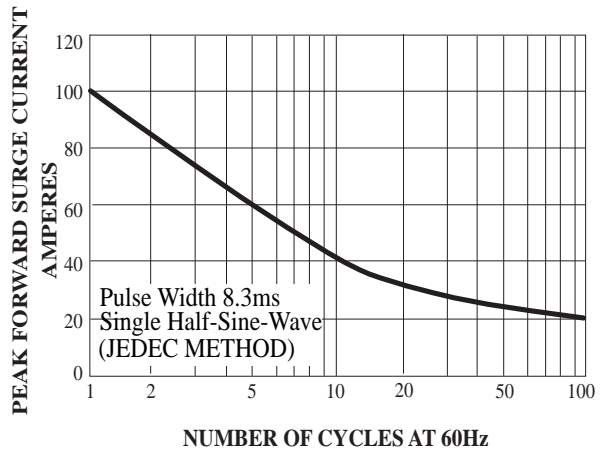


FIG.2 Maximum Non-Repetitive Surge Current

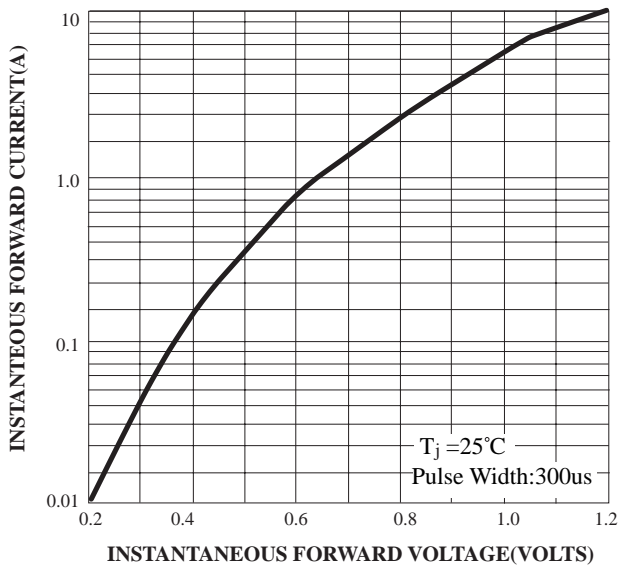


FIG.3 Typical Forward Characteristics

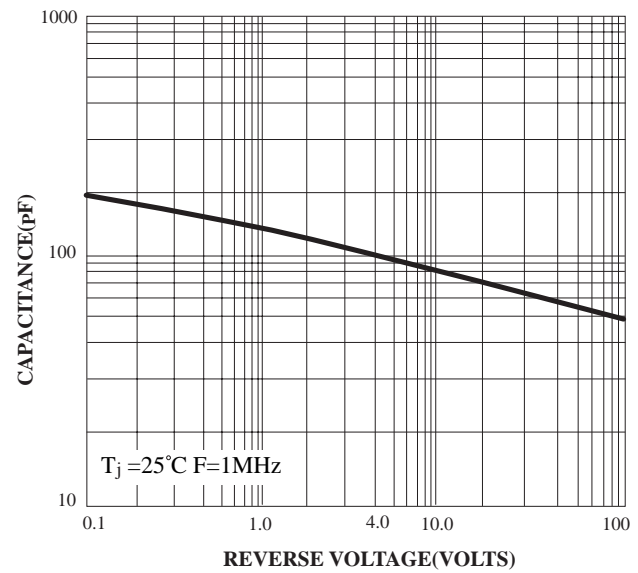


FIG.4 Typical Junction Capacitance

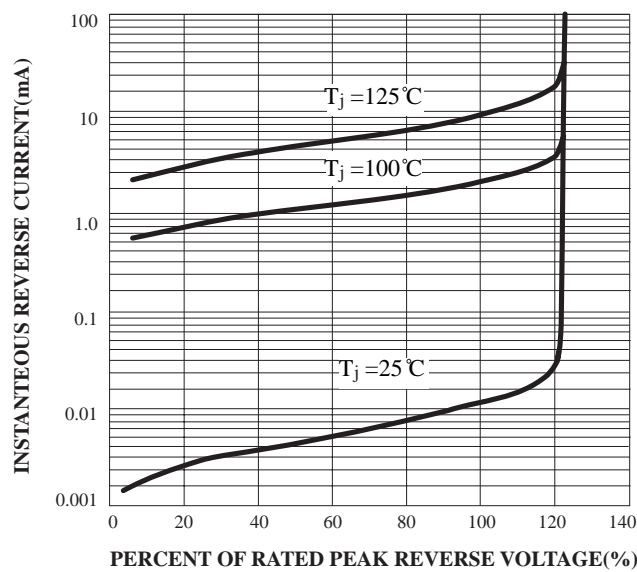


FIG.5 Typical Reverse Characteristics