

## Surface Mount Fast Recovery Rectifiers

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

### Features:

- \* For Surface Mount Application
- \* Glass Passivated Chip
- \* Low Reverse Leakage Current
- \* Low Forward Voltage Drop And High Current Capability
- \* Plastic Material Has UL Flammability Classification 94V-0

### Mechanical Data:

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

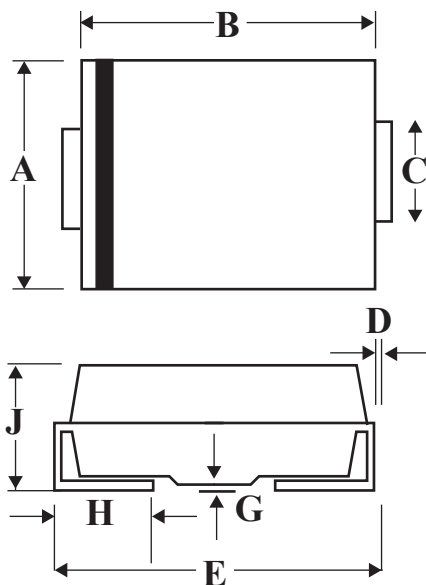
**REVERSE VOLTAGE**  
**50 TO 1000 VOLTS**  
**FORWARD CURRENT**  
**1.0 AMPERE**



**SMB(DO-214AA)**

## SMB Outline Dimension

Unit:mm



SMB		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.80
C	1.96	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62

## Maximum Ratings and Electrical Characteristics

Rating 25 C Ambient Temperature Unless Otherwise Specified.

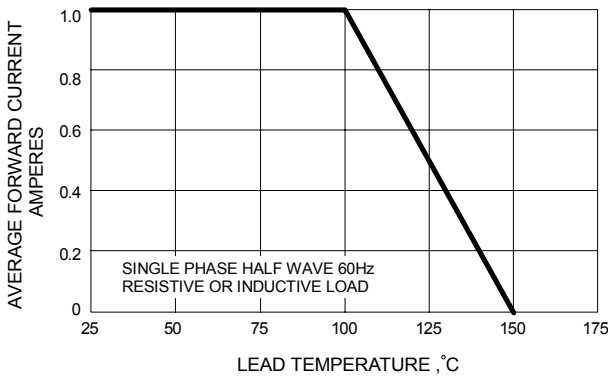
Single Phase HalfWave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

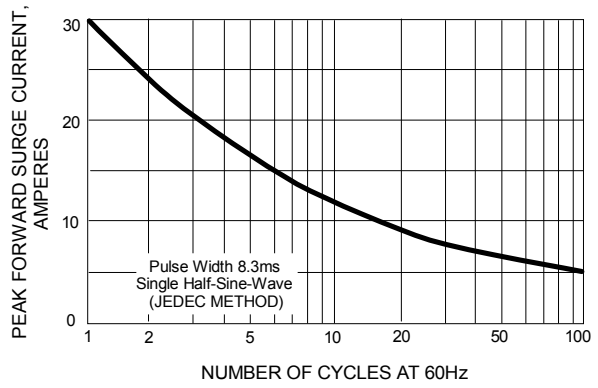
Characteristics	Symbol	RS1AB	RS1BB	RS1DB	RS1GB	RS1JB	RS1KB	RS1MB	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead Length at $T_a = 55^{\circ}C$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current,8.3 ms Single Half Sine-WaveSuperimposed on Rated Load	$I_{FSM}$	30							A
Maximum Instantaneous At 1.0A DC	$V_F$	1.3							V
Maximum DC Reverse Current @ $T_a = 25^{\circ}C$ At Rated DC BlockingVoltage @ $T_a = 100^{\circ}C$	$I_R$	5.0 100							$\mu A$
Max Reverse Recovery Time	$T_{rr}$	150				250	500		nS
Typical Junction Capacitance	$C_J$	15							pF
OperatingTemperature Range	$T_J$	+150							$^{\circ}C$
StorageTemperature Range	$T_{STG}$	-65 to +150							$^{\circ}C$

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

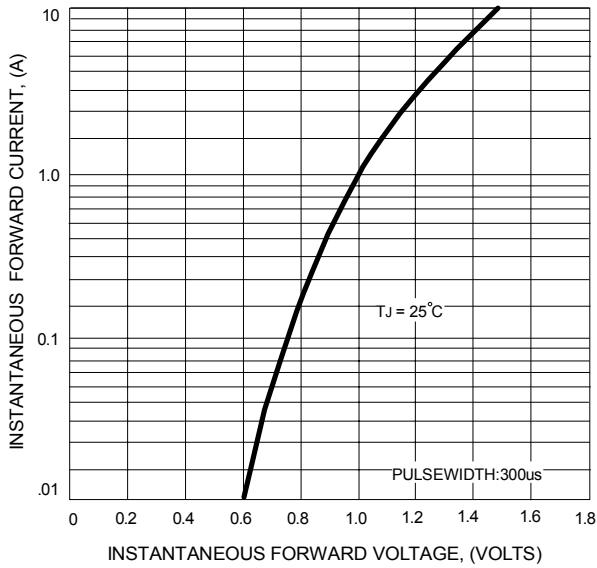
2.Thermal Resistance Junction to case.



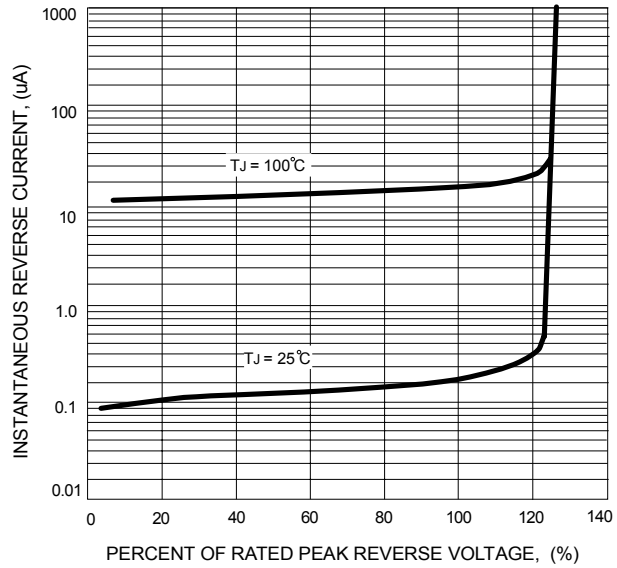
**FIG.1 Forward Current Derating Curve**



**FIG.2 Maximum Non-Petitive Surge Current**



**FIG.3 Typical Forward Characteristics**



**FIG.4 Typical Reverse Characteristics**