

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

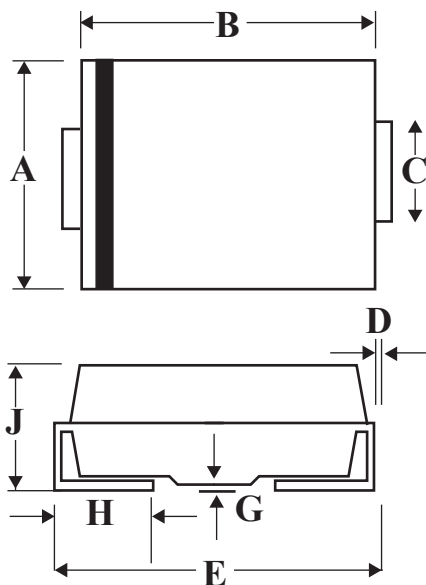
REVERSE VOLTAGE
50 TO 1000 VOLTS
FORWARD CURRENT
1.0 AMPERE



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							μA
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.

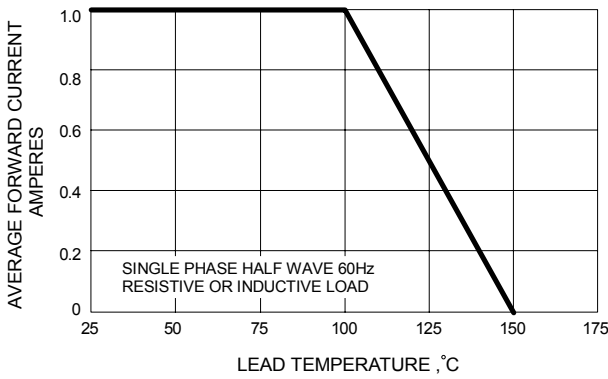


FIG.1 Forward Current Derating Curve

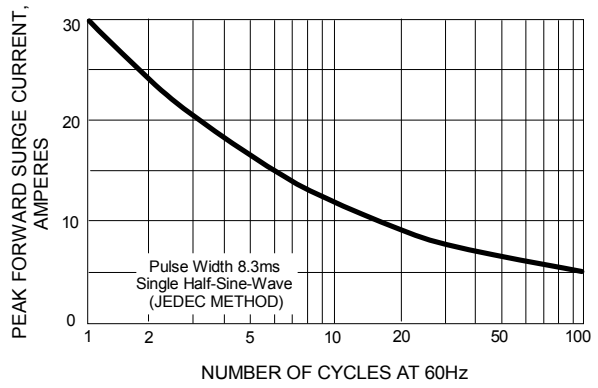


FIG.2 Maximum Non-Repetitive Surge Current

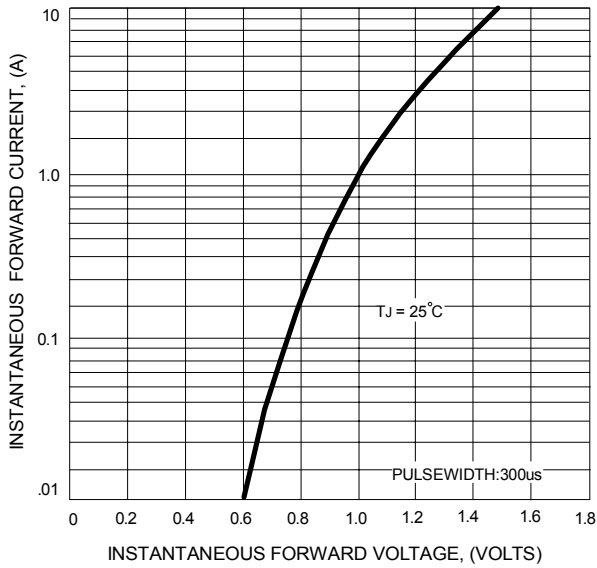


FIG.3 Typical Forward Characteristics

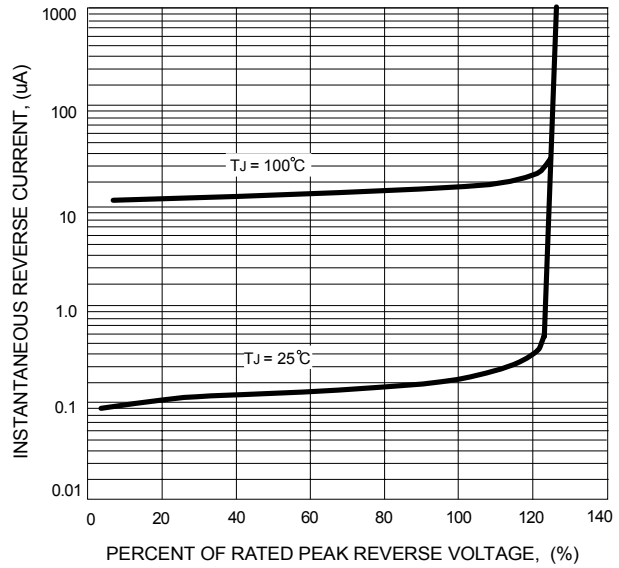


FIG.4 Typical Reverse Characteristics