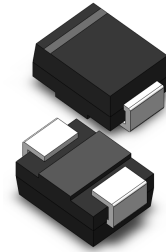


**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 2.0 A**

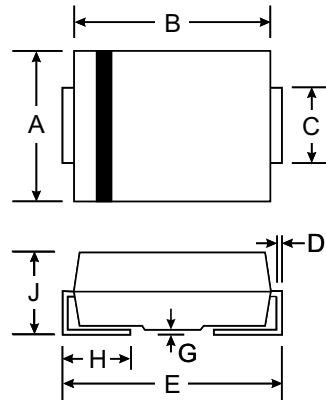
### Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop and High Current Capability
- Ideally Suited for Automated Assembly



### Mechanical Data

- Case: SMB(DO-214AA)Molded Plastic
- Case Material - UL Flammability Rating Classification 94V-0
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.093 grams (approx.)



SMB(DO-214AA)		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	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
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	S2AB	S2BB	S2DB	S2GB	S2JB	S2KB	S2MB	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_T = 100^\circ\text{C}$	$I_{(AV)}$	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60							A
Forward Voltage @ $I_F = 2.0\text{A}$	$V_{FM}$	1.1							V
Peak Reverse Current at Rated DC Blocking Voltage @ $T_A = 25^\circ\text{C}$ @ $T_A = 125^\circ\text{C}$	$I_{RM}$	5.0 200							$\mu\text{A}$
Typical Total Capacitance (Note 1)	$C_T$	30							pF
Typical Thermal Resistance, Junction to Terminal (Note 2)	$R_{\theta JT}$	16							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150							$^\circ\text{C}$

- Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.  
 2. Thermal Resistance Junction to Terminal, unit mounted on PC board with 5.0 mm<sup>2</sup> (0.013 mm thick) copper pads as heat sink.

### RATING AND CHARACTERISTIC CURVES S2AB THRU S2MB

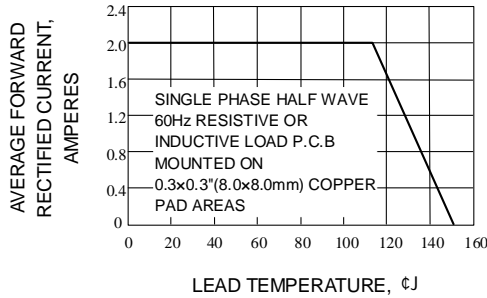


Fig. 1-FORWARD CURRENT DERATING CURVE

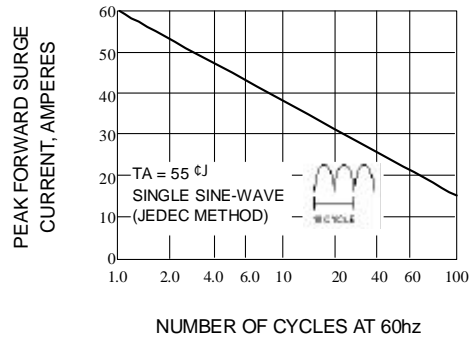


Fig. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

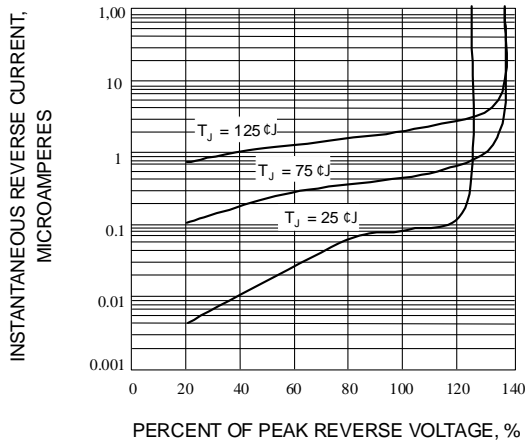


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

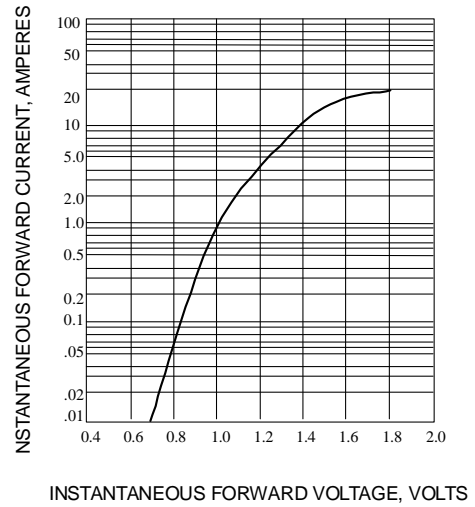


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

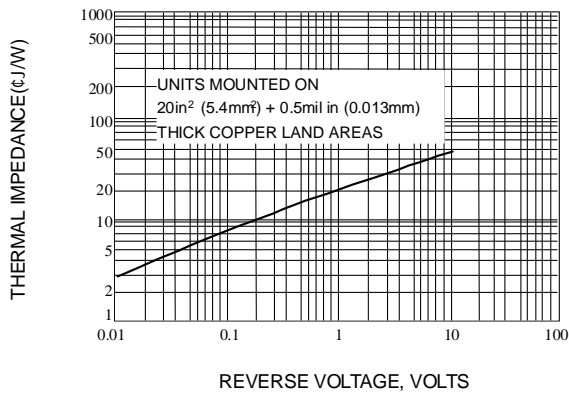


Fig. 5-TRANSIENT THERMAL IMPEDANCE

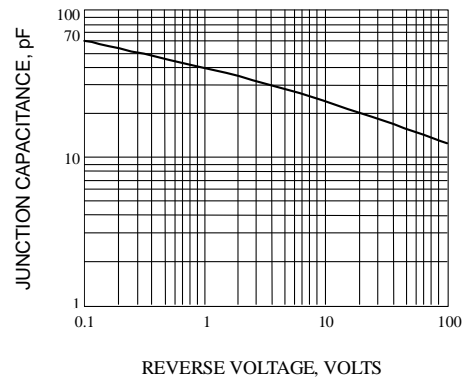


Fig. 6-TYPICAL JUNCTION CAPACITANCE