



# S2AB THRU S2MB

## 2.0 AMP SURFACE MOUNT SILICON RECTIFIERS



### FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.093 grams

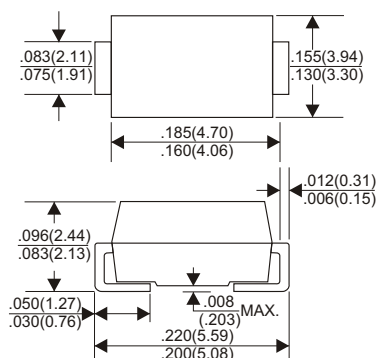
### VOLTAGE RANGE

50 to 1000 Volts

### CURRENT

2.0 Ampere

#### DO-214AA(SMB)



Dimensions in inches and (millimeters)

## 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%.

| TYPE NUMBER                                                                                           | S2AB       | S2BB | S2DB | S2GB | S2JB | S2KB | S2MB | UNITS |
|-------------------------------------------------------------------------------------------------------|------------|------|------|------|------|------|------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                                | 50         | 100  | 200  | 400  | 600  | 800  | 1000 | V     |
| Maximum RMS Voltage                                                                                   | 35         | 70   | 140  | 280  | 420  | 560  | 700  | V     |
| Maximum DC Blocking Voltage                                                                           | 50         | 100  | 200  | 400  | 600  | 800  | 1000 | V     |
| Maximum Average Forward Rectified Current<br>At T <sub>L</sub> =100°C                                 | 2.0        |      |      |      |      |      |      | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | 60         |      |      |      |      |      |      | A     |
| Maximum Instantaneous Forward Voltage at 2.0A                                                         | 1.1        |      |      |      |      |      |      | V     |
| Maximum DC Reverse Current<br>at Rated DC Blocking Voltage                                            | 5.0        |      |      |      |      |      |      | μA    |
| Typical Junction Capacitance (Note1)                                                                  | 30         |      |      |      |      |      |      | pF    |
| Typical Thermal Resistance R <sub>JL</sub> (Note 2)                                                   | 16         |      |      |      |      |      |      | °C/W  |
| Operating and Storage Temperature Range T <sub>J</sub> , T <sub>stg</sub>                             | -55 — +150 |      |      |      |      |      |      | °C    |

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.

## RATING AND CHARACTERISTIC CURVES (S2AB THRU S2MB)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

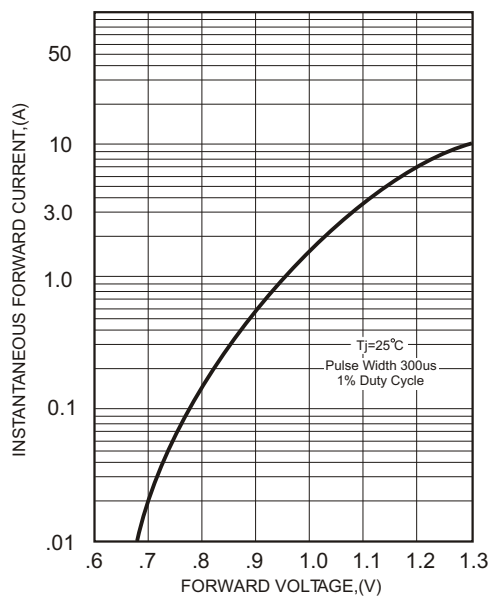


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

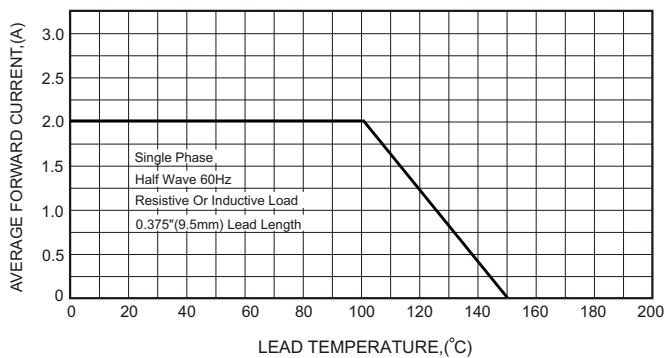


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

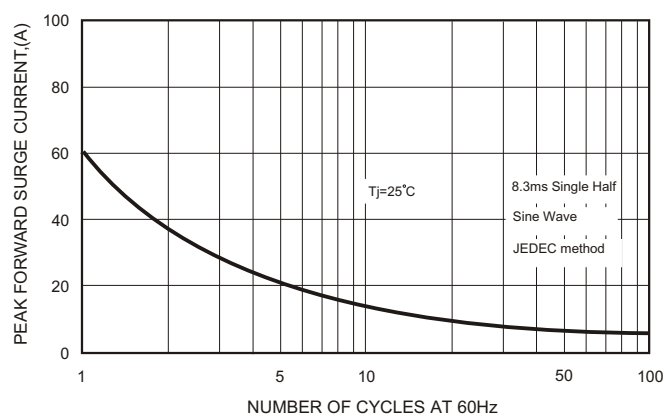


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

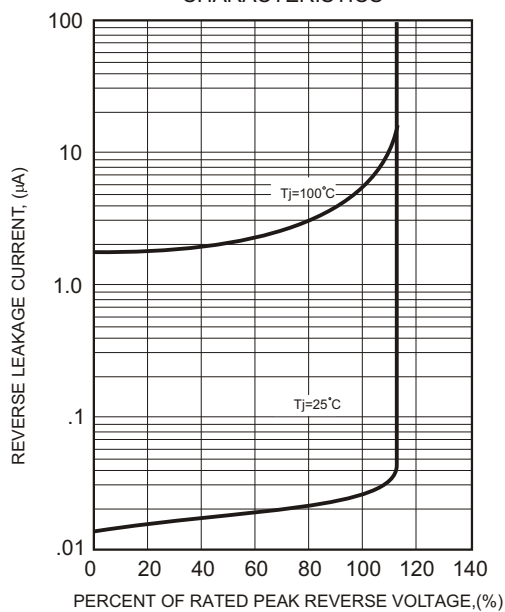
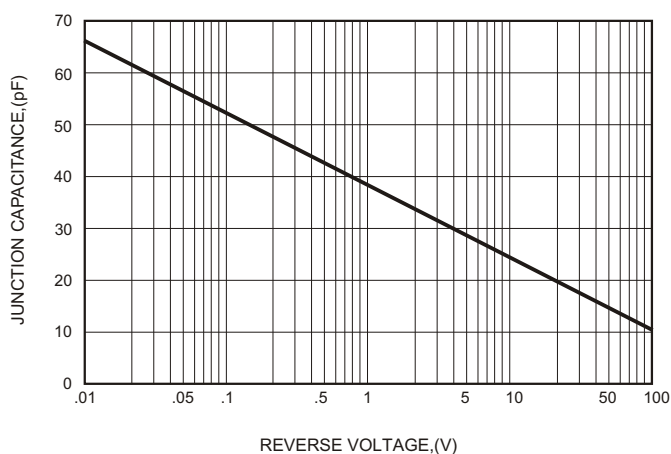


FIG.5-TYPICAL JUNCTION CAPACITANCE



Attention:

The graph is for reference only, can't be the basis for judgment.

Any and all information described or contained herein are subject to change without notice due to product/technology improvement.