

# S2A THRU S2M



## 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

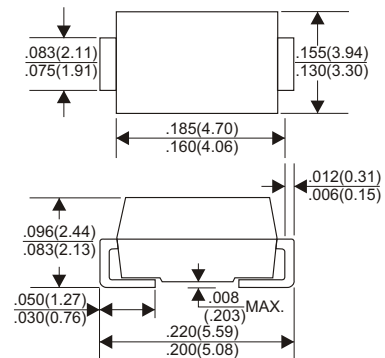
### VOLTAGE RANGE

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   | S2A        | S2B | S2D | S2G | S2J | S2K | S2M  | 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> =110°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   | 1.10       |     |     |     |     |     |      | V     |
| Maximum DC Reverse Current<br>at Rated DC Blocking Voltage  | 5.0        |     |     |     |     |     |      | A     |
| 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>                             | -65 — +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 (S2A THRU S2M)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

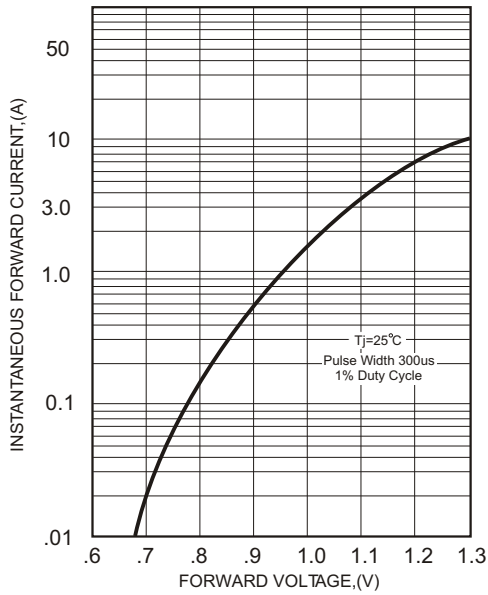


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

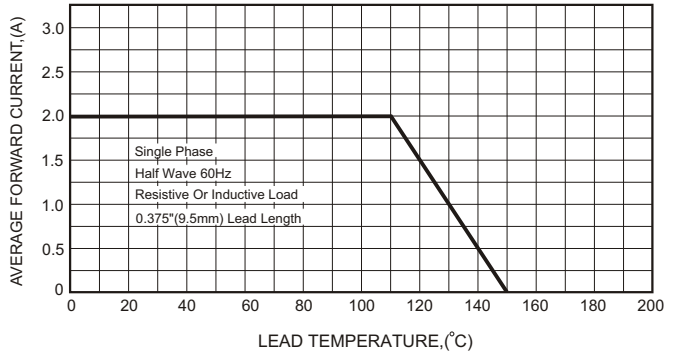


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

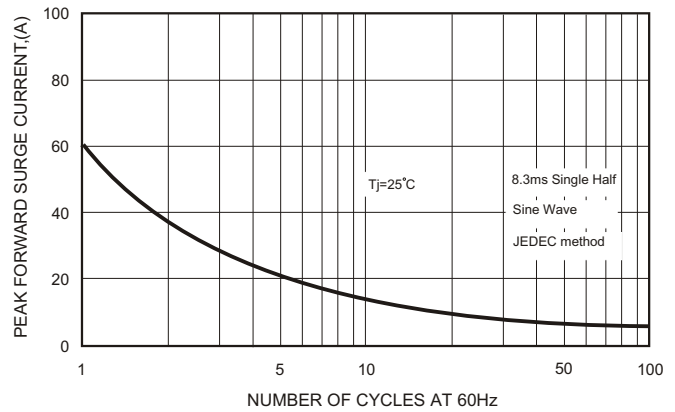


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

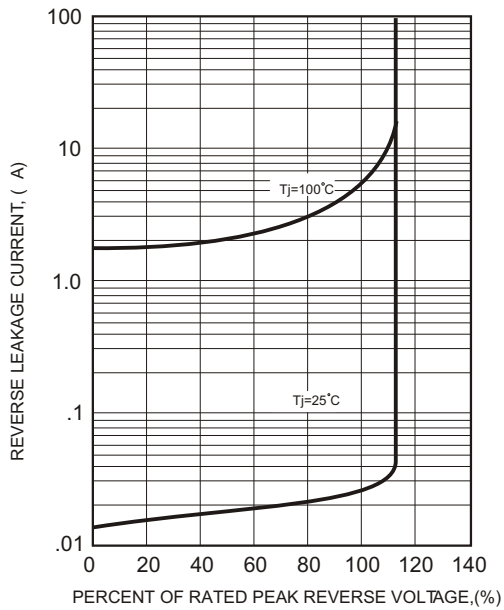


FIG.5-TYPICAL JUNCTION CAPACITANCE

