

# S2AA THRU S2MA



## 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: 0.063 grams

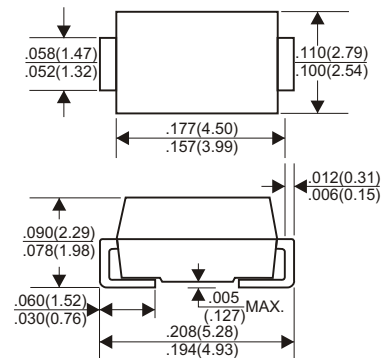
### VOLTAGE RANGE

50 to 1000 Volts

### CURRENT

2.0 Ampere

#### DO-214AC(SMA)



## 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  | S2AA | S2BA | S2DA | S2GA | S2JA | S2KA | S2MA | 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  |      |      |      |      |      |      |      |            |      |
| At T <sub>L</sub> =100°C   |      |      |      |      |      |      |      | 2.0        | A    |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) |      |      |      |      |      |      |      | 60         | A    |
| Maximum Instantaneous Forward Voltage at 2.0A  |      |      |      |      |      |      |      | 1.10       | V    |
| Maximum DC Reverse Current   |      |      |      |      |      |      |      | 5.0        | μA   |
| at Rated DC Blocking Voltage   |      |      |      |      |      |      |      | 200        | 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>                          |      |      |      |      |      |      |      | -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 (S2AA THRU S2MA)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

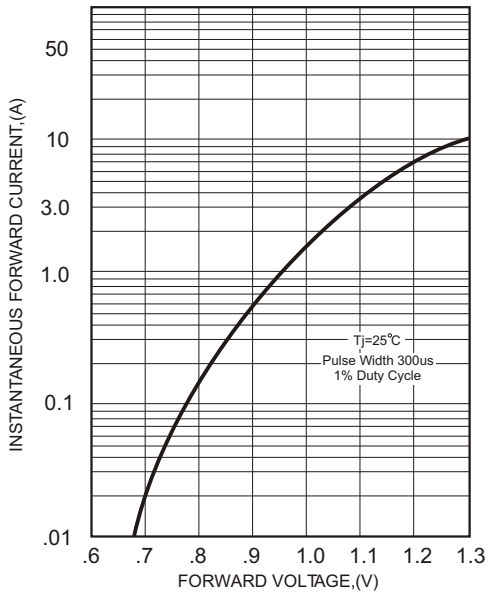


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

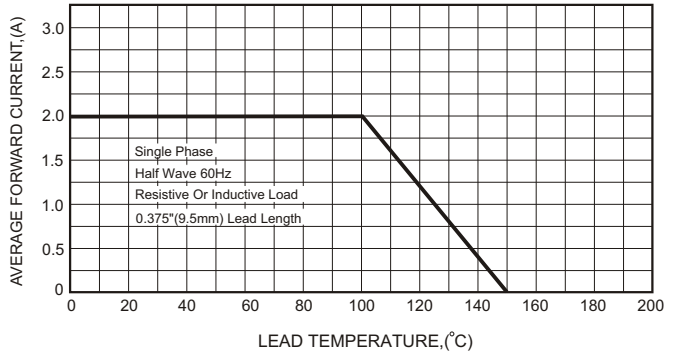


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

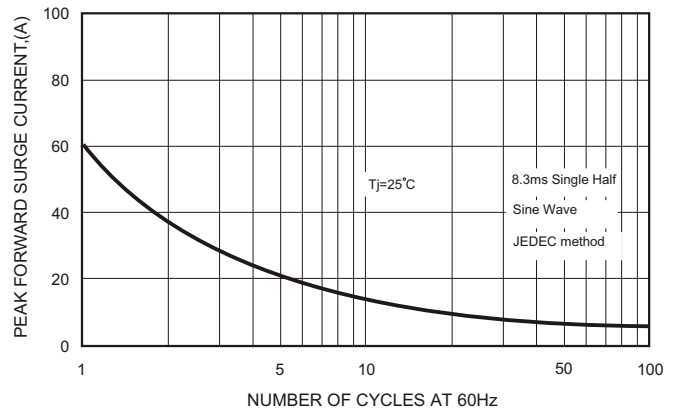


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

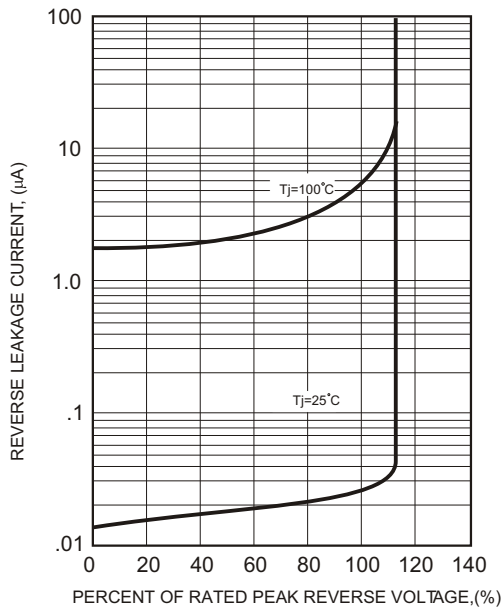


FIG.5-TYPICAL JUNCTION CAPACITANCE

