

# 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

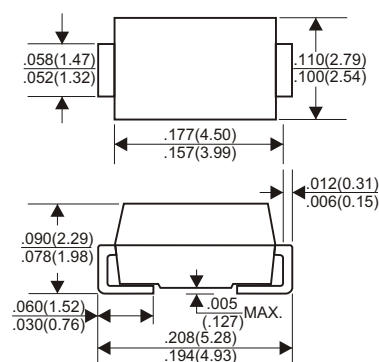
### VOLTAGE RANGE

50 to 1000 Volts

### CURRENT

2.0 Amperes

#### 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 $T_L=100^\circ\text{C}$	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	1.1							V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	5.0							$\mu\text{A}$
at Rated DC Blocking Voltage $T_a=125^\circ\text{C}$	200							$\mu\text{A}$
Typical Junction Capacitance (Note 1)	30							pF
Typical Thermal Resistance $R_{\theta\text{JL}}$ (Note 2)	20							$^\circ\text{C/W}$
Operating and Storage Temperature Range $T_J, T_{\text{STG}}$	-65 — +150							$^\circ\text{C}$

#### 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

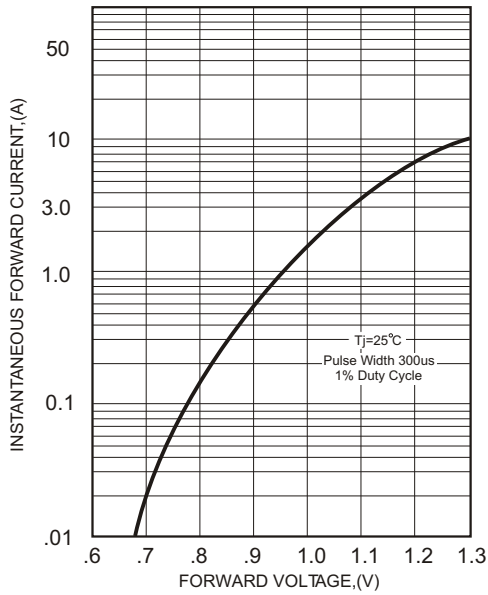


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

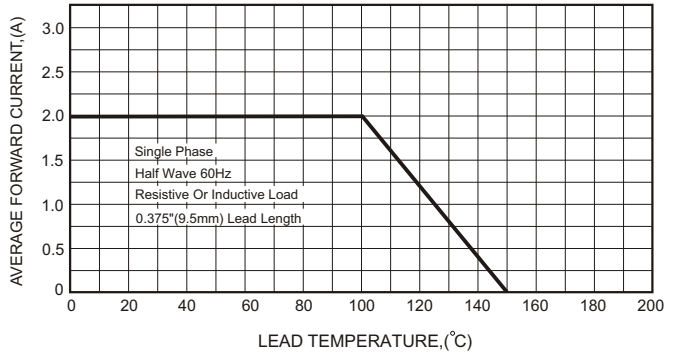


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

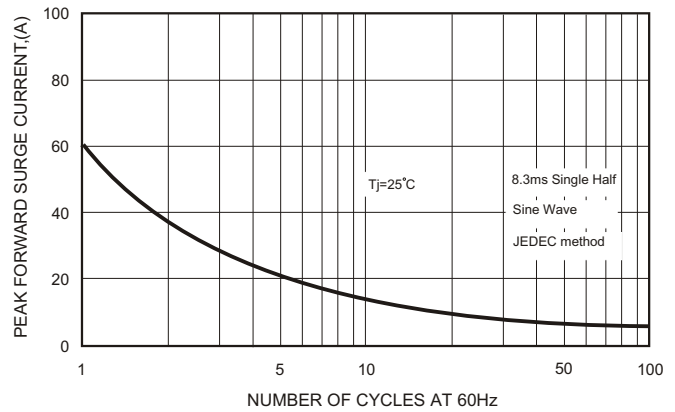


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

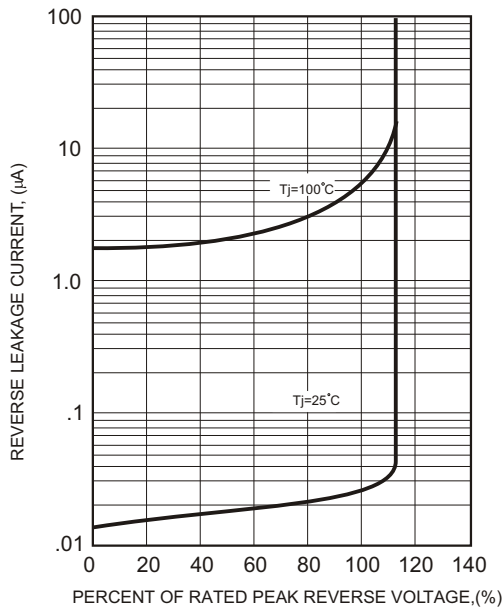


FIG.5-TYPICAL JUNCTION CAPACITANCE

