

# S2AF THRU S2MF



## 2.0 AMP SURFACE MOUNT GLASS PASSIVATED RECTIFIERS

### FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* High surge current capability

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.064 gram
- \* Both normal and Pb free product are available:
- \* Normal: 80-95% Sn, 5-20% Pb
- \* Pb free: 99% Sn above can meet Rohs environment substance directive request

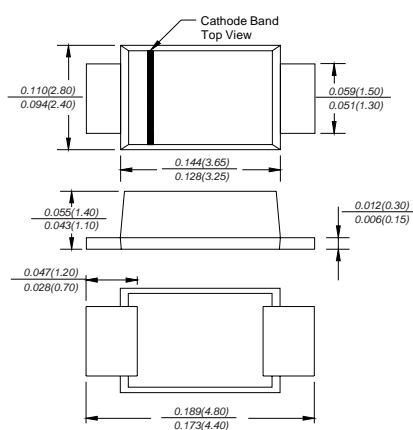
### VOLTAGE RANGE

50 to 1000 Volts

### CURRENT

2.0 Ampere

#### SMAF



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	S2AF	S2BF	S2DF	S2GF	S2JF	S2KF	S2MF	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	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 Ta=25°C	2.0							µA
at Rated DC Blocking Voltage Ta=100°C	20							µA
Typical Junction Capacitance (Note 1)	12							pF
Typical Thermal Resistance R JA (Note 2)	50							°C/W
Operating and Storage Temperature Range Tj, TSTG	-65 — +175							°C

#### NOTES:

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

## RATING AND CHARACTERISTIC CURVES (S2AF THRU S2MF)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

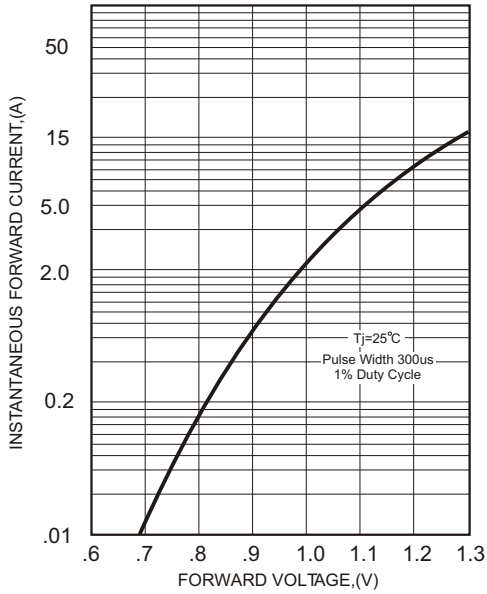


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

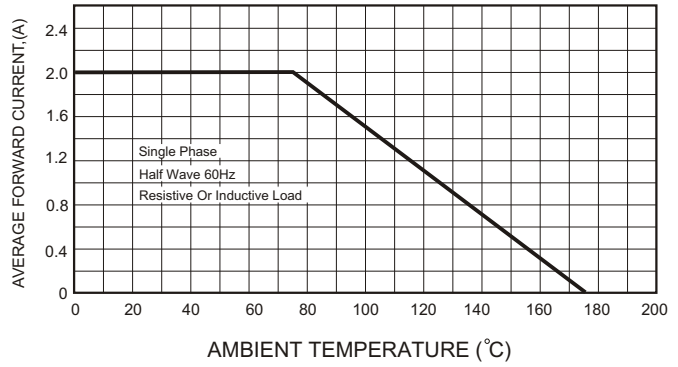


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

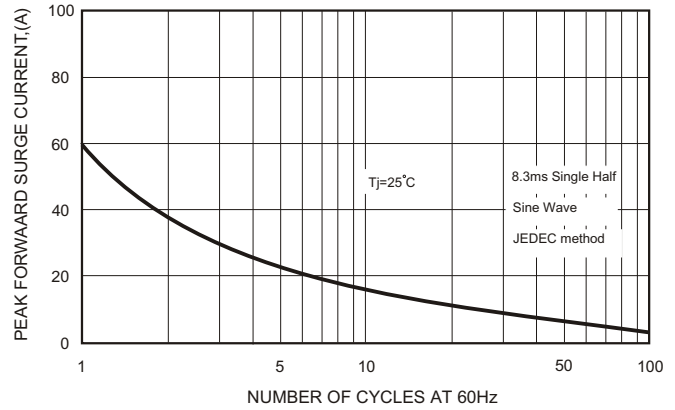


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

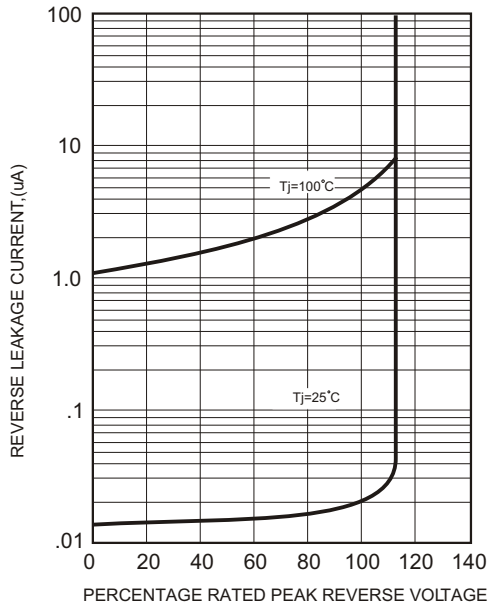


FIG.5-TYPICAL JUNCTION CAPACITANCE

