

S2ABF THRU S2MBF 2.0 AMP SURFACE MOUNT SILICON RECTIFIERS

FEATURES

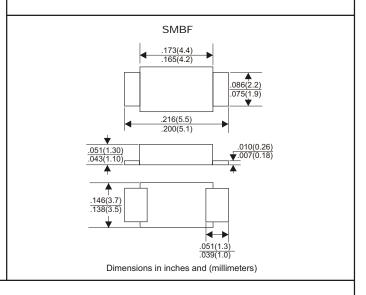
- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop

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 Ampere



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwies specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

TYPE NUMBER	S2ABF	S2BBF	S2DBF	S2GBF	S2JBF	S2KBF	S2MBF	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 TL=110°C	2.0							Α
Peak Forward Surge Current, 8.3 ms single half sine-wave								
superimposed on rated load (JEDEC method)	60						Α	
Maximum Instantaneous Forward Voltage at 2.0A	1.10						V	
Maximum DC Reverse Current Ta=25°C	5.0						μА	
at Rated DC Blocking Voltage Ta=125°C	200							μА
Typical Junction Capacitance (Note1)	30						pF	
Typical Thermal Resistance R JL (Note 2)	16						°C/W	
Operating and Storage Temperature Range TJ, TsTG	-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 (S2ABFTHRU S2MBF)

CHARACTERISTICS

50

50

10

10

Tj=25°C

Pulse Width 300us
1% Duty Cycle

.01

FIG.1-TYPICAL FORWARD

FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

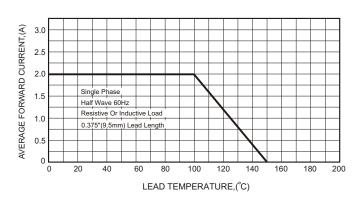


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

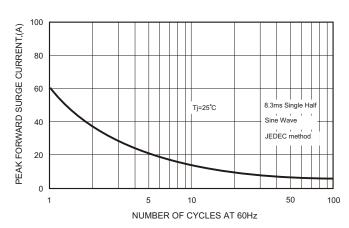


FIG.3 - TYPICAL REVERSE

1.0

FORWARD VOLTAGE,(V)

1.2 1.3

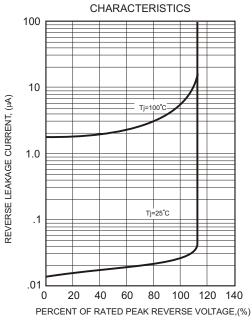


FIG.5-TYPICAL JUNCTION CAPACITANCE

