S3AB THRU S3MB

3.0 AMP SURFACE MOUNT SILICON RECTIFIERS



FEATURES

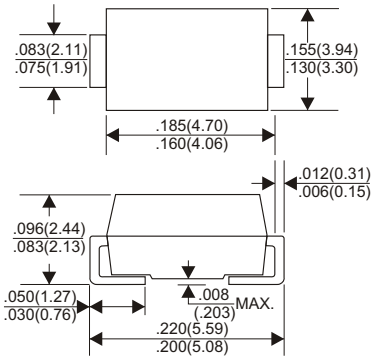
* Ideal for surface mount applications
* Easy pick and place
* Built-in strain relief
* Low forward voltage drop

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
3.0 Ampere

DO-214AA(SMB)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	S3AB	S3BB	S3DB	S3GB	S3JB	S3KB	S3MB	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=75˚C	3.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	100							A
Maximum Instantaneous Forward Voltage at 3.0A	1.20							V
Maximum DC Reverse Current Ta=25˚C	5.0							A
at Rated DC Blocking Voltage Ta=125˚C	250							A
Typical Junction Capacitance (Note1)	60							pF
Typical Thermal Resistance R JL (Note 2)	13							˚C/W
Operating and Storage Temperature Range T_J, T_{STG}	-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 (S3AB THRU S3MB)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

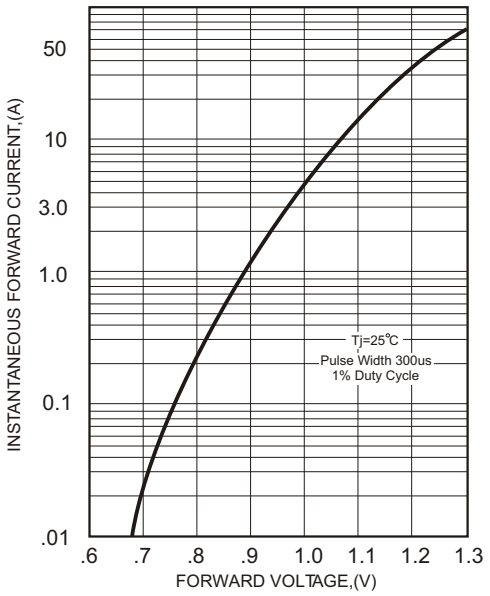


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

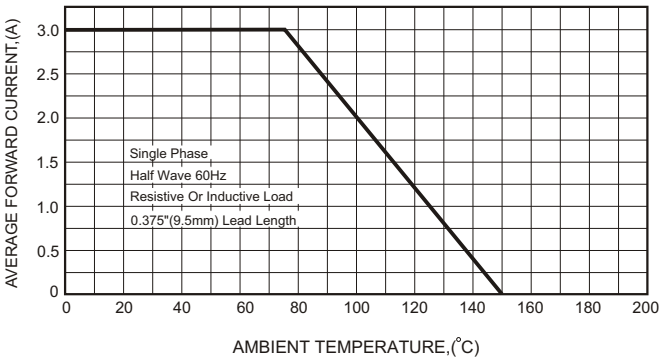


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

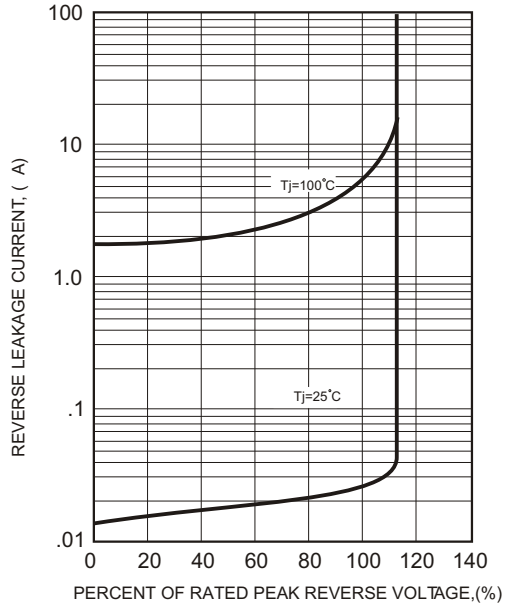


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

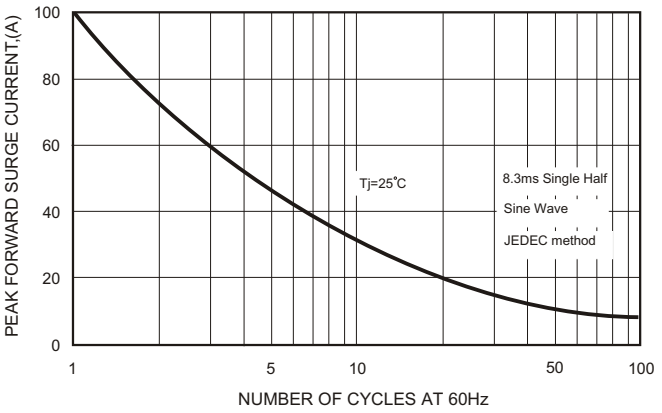


FIG.5-TYPICAL JUNCTION CAPACITANCE

