

## SS315BF THRU SS320BF 3.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

### FEATURES

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

### MECHANICAL DATA

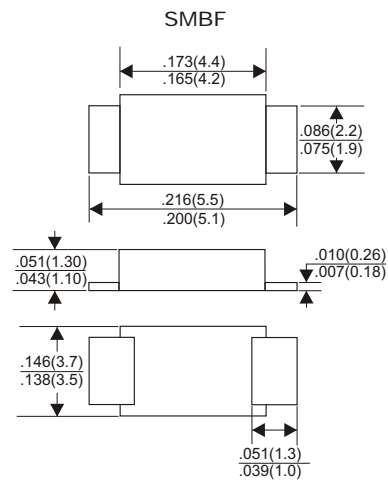
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

### VOLTAGE RANGE

150 to 200 Volts

### CURRENT

3.0 Amperes



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	SS315BF	SS320BF	UNITS
Maximum Recurrent Peak Reverse Voltage	150	200	V
Maximum RMS Voltage	105	140	V
Maximum DC Blocking Voltage	150	200	V
Maximum Average Forward Rectified Current at $T_L=100^\circ\text{C}$	3.0		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	80		A
Maximum Instantaneous Forward Voltage at 3.0A	0.92		V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	0.02		mA
at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	2		mA
Typical Junction Capacitance (Note 1)	250		PF
Typical Thermal Resistance $R_{\theta J L}$ (Note 2)	10		$^\circ\text{C}/\text{W}$
Operating Temperature Range $T_j$	-65 — +175		$^\circ\text{C}$
Storage Temperature Range $T_{stg}$	-65 — +175		$^\circ\text{C}$

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

## RATING AND CHARACTERISTIC CURVES (SS315BF THRU SS320BF)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

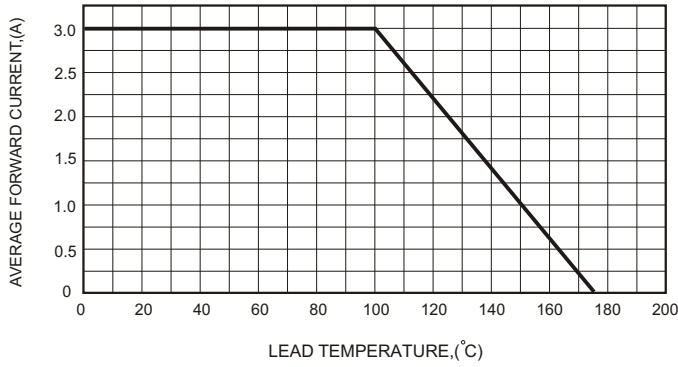


FIG.2-TYPICAL FORWARD CHARACTERISTICS

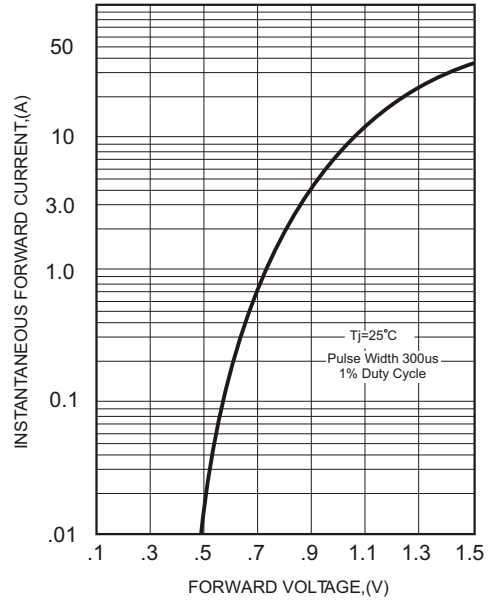


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

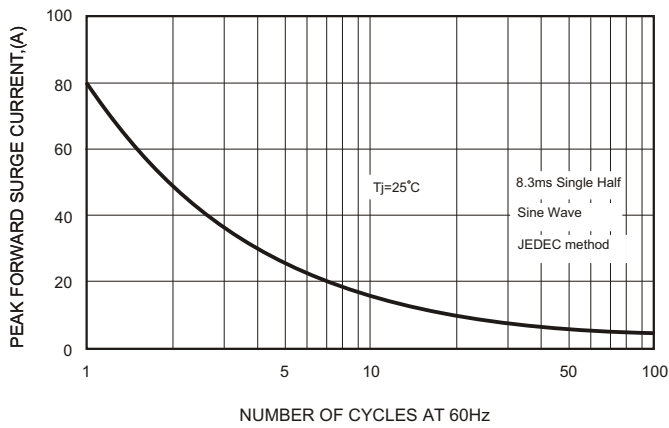


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

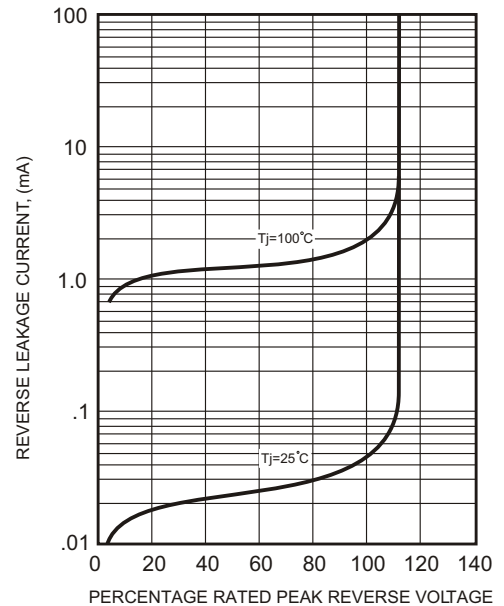


FIG.4-TYPICAL JUNCTION CAPACITANCE

