

# 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

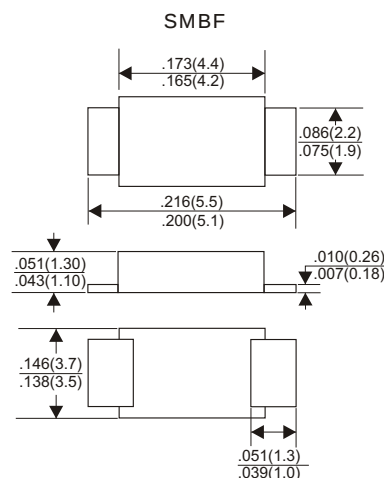
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

### 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<br>at $T_L=100^{\circ}\text{C}$                             | 3.0                     |         | A                    |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | 80                      |         | A                    |
| Maximum Instantaneous Forward Voltage at 3.0A                                                         | 0.92                    |         | V                    |
| Maximum DC Reverse Current<br>$T_a=25^{\circ}\text{C}$                                                | 0.02                    |         | mA                   |
| at Rated DC Blocking Voltage<br>$T_a=100^{\circ}\text{C}$                                             | 2                       |         | mA                   |
| Typical Junction Capacitance (Note1)                                                                  | 250                     |         | PF                   |
| Typical Thermal Resistance $R_{\theta JL}$ (Note 2)                                                   | 10                      |         | $^{\circ}\text{C/W}$ |
| Operating Temperature Range $T_J$                                                                     | $-65 \text{ --- } +175$ |         | $^{\circ}\text{C}$   |
| Storage Temperature Range $T_{STG}$                                                                   | $-65 \text{ --- } +175$ |         | $^{\circ}\text{C}$   |

#### 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

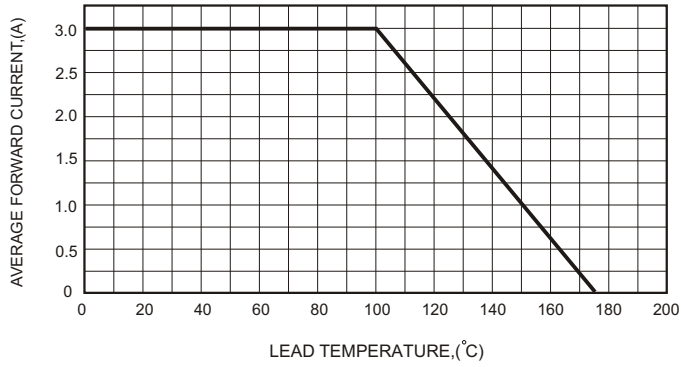


FIG.2-TYPICAL FORWARD CHARACTERISTICS

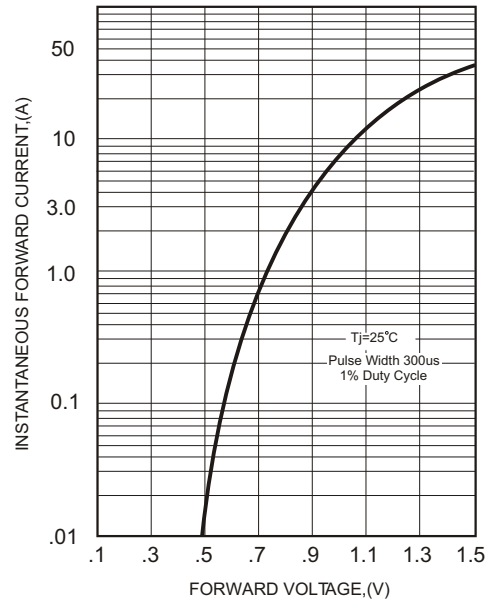


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

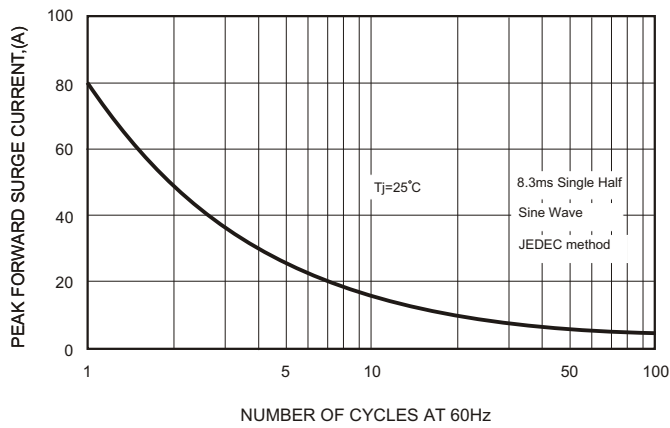


FIG.4-TYPICAL JUNCTION CAPACITANCE

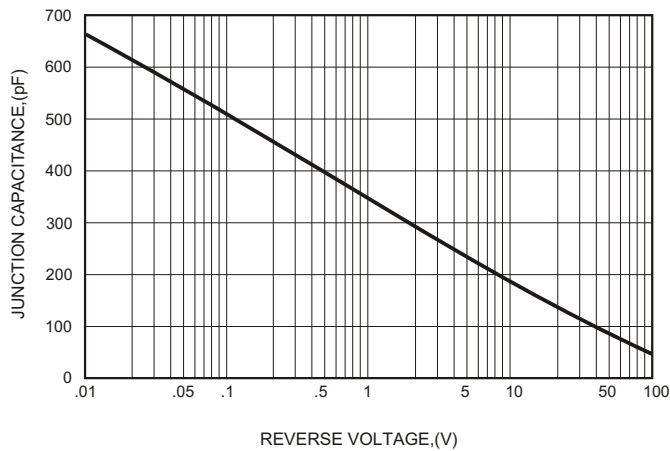


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

