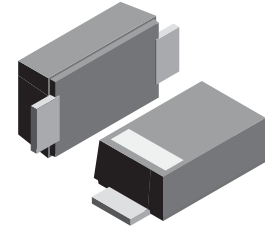


**VOLTAGE RANGE: 150 - 200V**  
**CURRENT: 5.0 A**

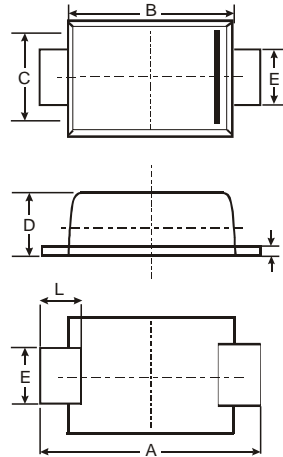


### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

### Mechanical Data

- Case: SMBF , Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.0018 ounces, 0.05grams



SMBF			
Dim	Min	Max	Typ
A	5.45	5.55	5.50
B	4.27	4.33	4.30
C	3.57	3.63	3.60
D	1.32	1.38	1.35
E	1.96	2.00	1.98
H	0.019	0.021	0.20
L	0.73	0.77	0.75
All Dimensions in mm			

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

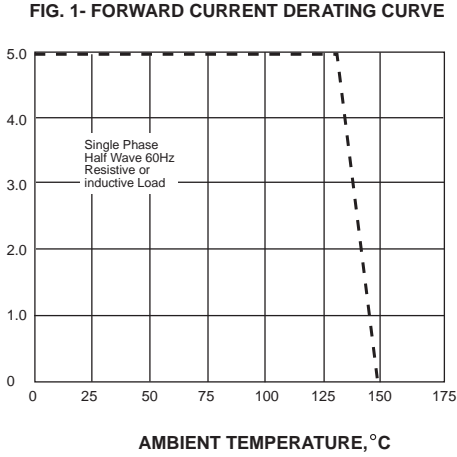
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SS5150BF	SS5200BF	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	150	200	Volts
Maximum RMS voltage	$V_{RMS}$	105	150	Volts
Maximum DC blocking voltage	$V_{DC}$	150	200	Volts
Maximum average forward rectified current at T <sub>L</sub> (see fig.1)	$I_{(AV)}$	5.0		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150.0		Amps
Maximum instantaneous forward voltage at 5.0A	$V_F$	0.85	0.95	Volts
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =100°C	$I_R$	0.2		mA
		2.0		
Typical junction capacitance (NOTE 1)	$C_J$	200		pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0		°C/W
Operating junction temperature range	$T_J$	-50 to +150		°C
Storage temperature range	$T_{STG}$	-50 to +150		°C

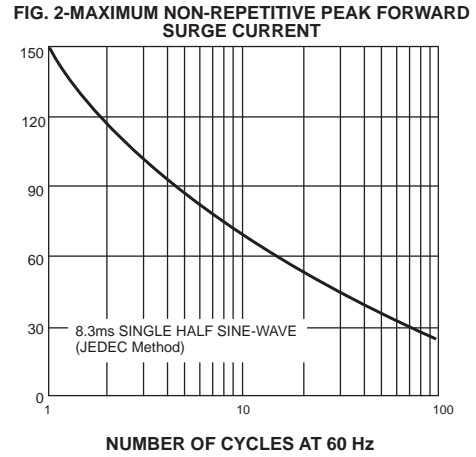
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

## RATINGS AND CHARACTERISTIC CURVES SS5150BF THRU SS5200BF

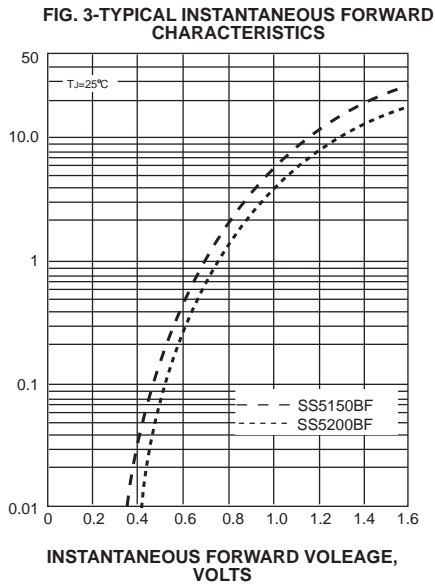
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



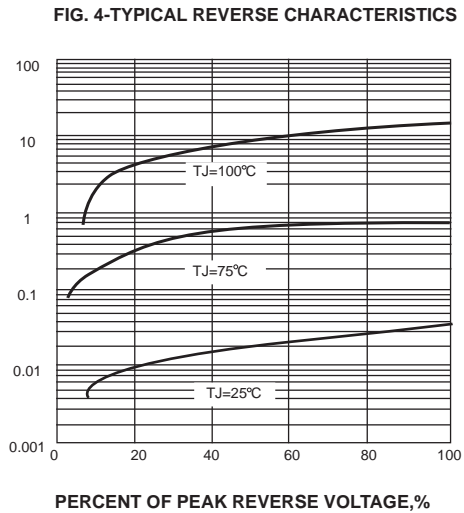
PEAK FORWARD SURGE CURRENT, AMPERES



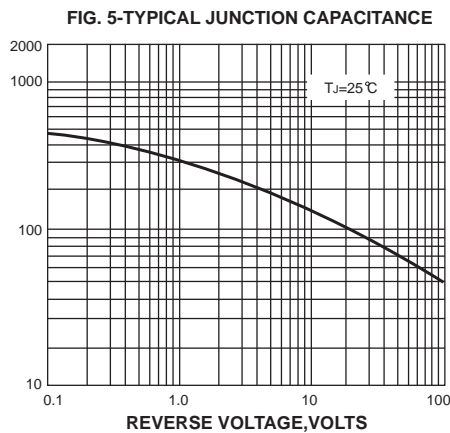
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

