



SS 3150BF THRU SS 3200BF

VOLTAGE RANGE
CURRENT

150 to 200 Volts
3.0 Ampere



Features

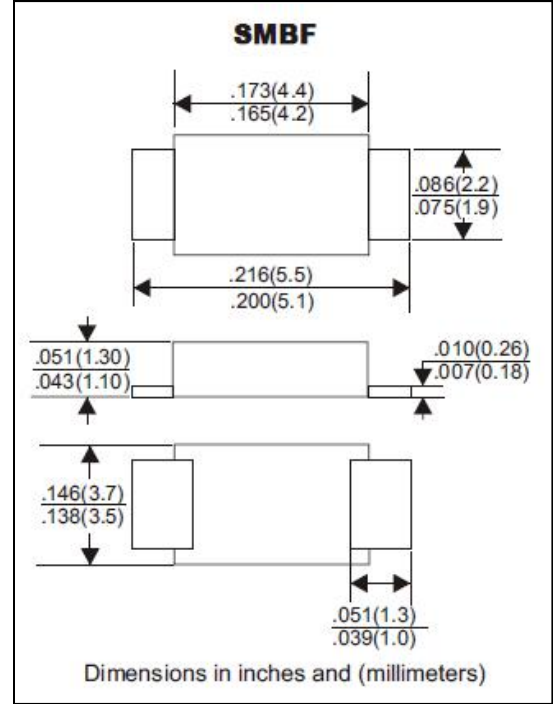
- The plastic package carries Underwriters Laboratory Flammability Classification 94V - 0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built - in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260 C/10 seconds at terminals

Mechanical Data

- Case: Transfer molded plastic
- Epoxy: UL 94V - 0 rate flame retardant
- Lead :Solder plated, solderable per MIL -STD -750 method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002ounce, 0.066 gram

Maximum Ratings and Electrical Characteristics

- Ratings at 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	SYMBOLS	SS3150BF	SS3200BF	UNIT
Device Marking Code		SS315	SS320	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	200	Volts
Maximum RMS Voltage	V_{RMS}	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	150	200	Volts
Maximum Average Forward Rectified Current at T_{see} figure 1 $T_c = 75^\circ C$	$I_{(AV)}$	3.0		Amps
Peak Forward Surge Current 8.3 ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	80		Amps
Maximum Instantaneous Forward Voltage @ 3.0A ^(Note1)	V_F	0.95		Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$T_A = 25^\circ C$	0.1		mA
	$T_A = 100^\circ C$	10		
Typical Thermal Resistance ^(Note 2)	$R_{\theta JA}$	90		$^\circ C/W$
	$R_{\theta JL}$	9		
Diode junction capacitance ^(Note 3)	C_j	110		pF
Operating Junction Temperature	T_j	-40 to +150		$^\circ C$
Storage Temperature Range	T_{STG}	-40 to +150		$^\circ C$

Notes:

1. Pulse test: 300μs pulse width, 1% duty cycle.
2. Thermal resistance from Junction to ambient and from junction to lead mounted on PCB. with 0.3 × 0.3 "(8.0 × 8.0mm) copper pad areas.
3. f = 1MHz and applied 4V DC reverse voltage.

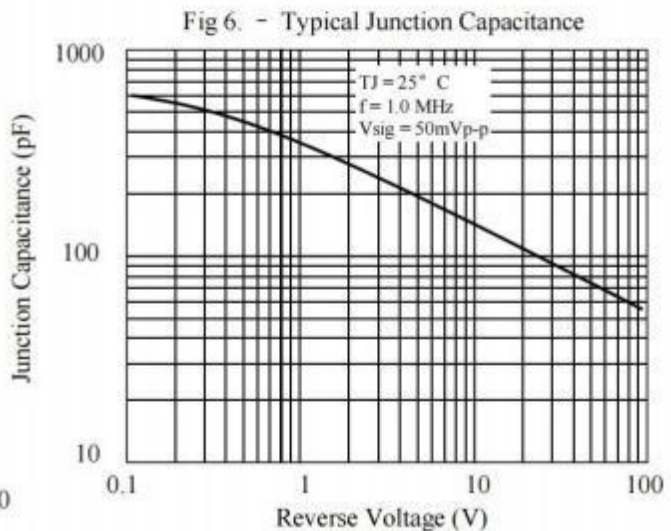
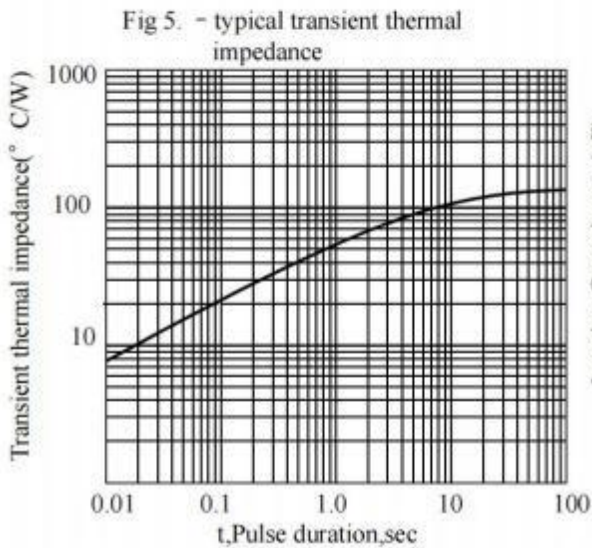
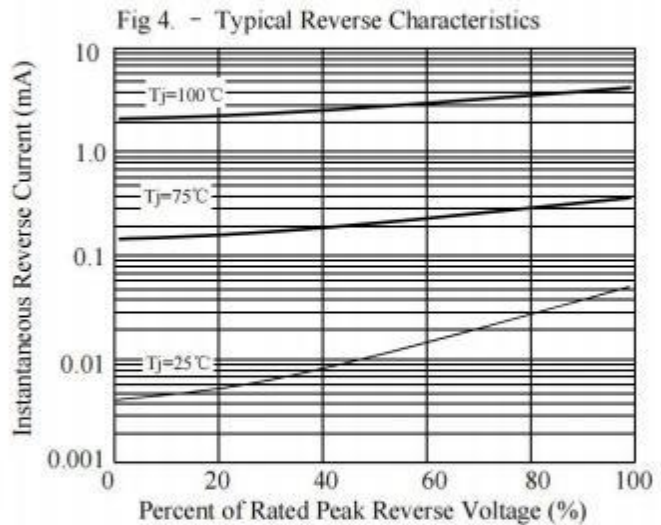
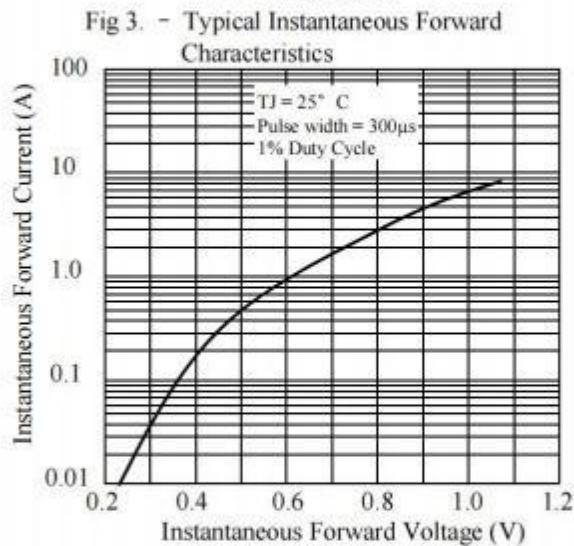
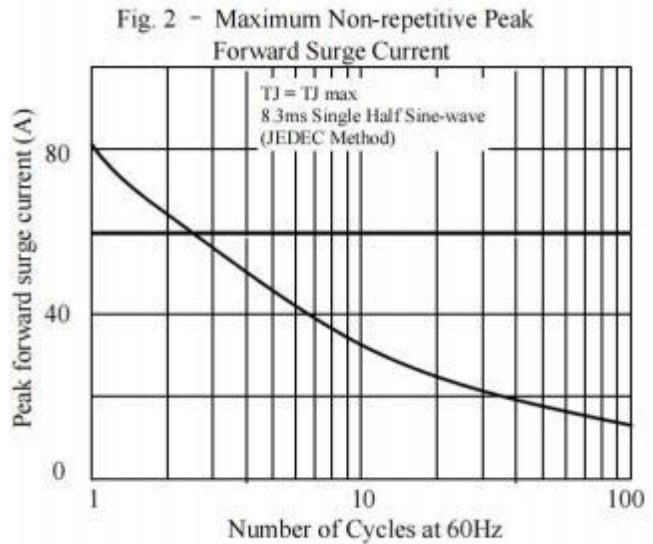
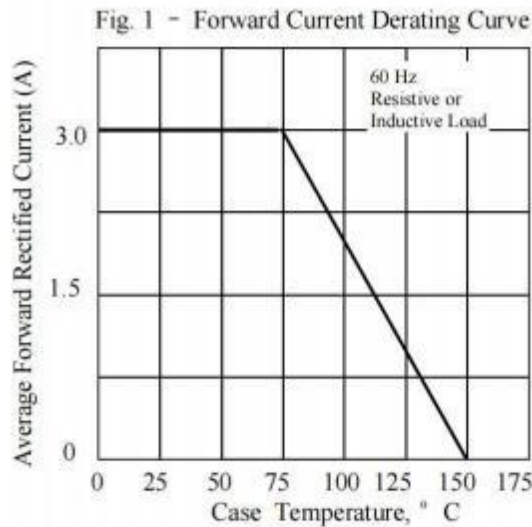


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Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)



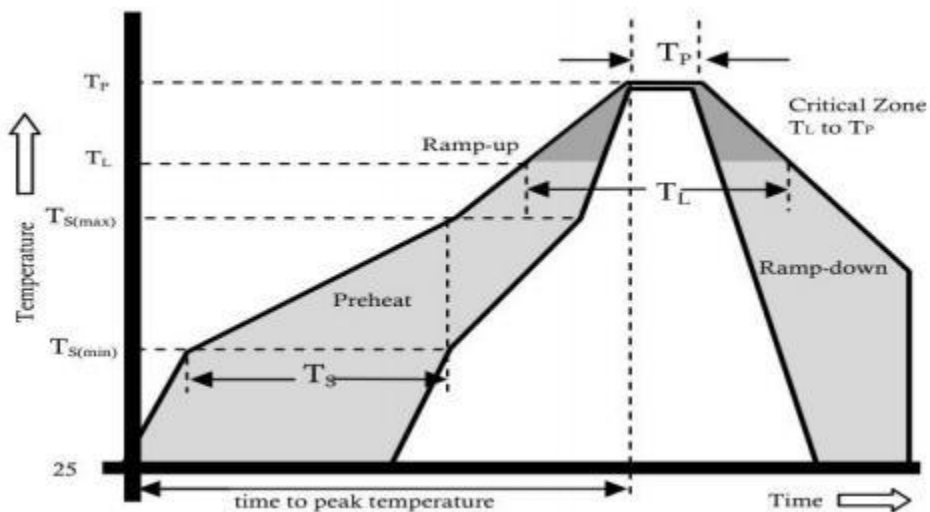


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Reflow Profile



Reflow Condition		Pb - Free Assembly
Pre Heat	Temperature Min.	+150°C
	Temperature Max.	+200°C
	Time(Min to Max)	60 -180 secs.
Average ramp up rate(Liquidus Temp(T_L) to peak)		3°C/sec. Max.
$T_{S(max)}$ to T_L - Ramp -up Rate		3°C/sec. Max.
Reflow	Temperature (T_L)(Liquidus)	+217°C
	Temperature (T_L)	60 -150 secs.
Peak Temp (T_P)		+(260+0/ -5) °C
Time within 5 °C of actual Peak Temp (T_P)		25 secs.
Ramp -down Rate		6°C/sec. Max.
Time 25°C to peak Temp (T_P)		8 min. Max.
Do not exceed		+260°C