

# SB15100F

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 100V

CURRENT: 15.0A

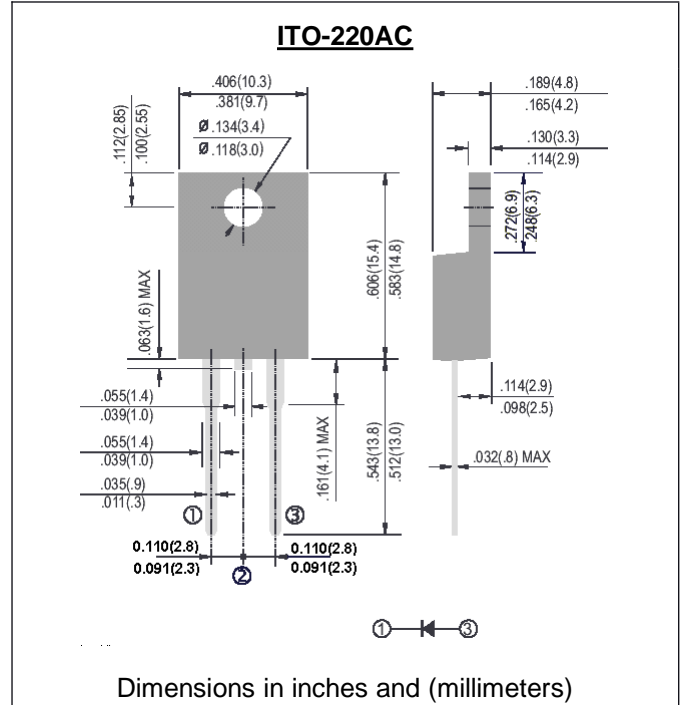


### FEATURE

High current capability, Low forward voltage drop  
Low power loss, high efficiency  
High surge capability  
High temperature soldering guaranteed  
250°C /10sec/0.375" lead length at 5 lbs tension

### MECHANICAL DATA

Case: JEDEC ITO-220 molded plastic body over passivated chip  
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026  
Polarity: Color band denotes cathode end  
Mounting Position: Any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

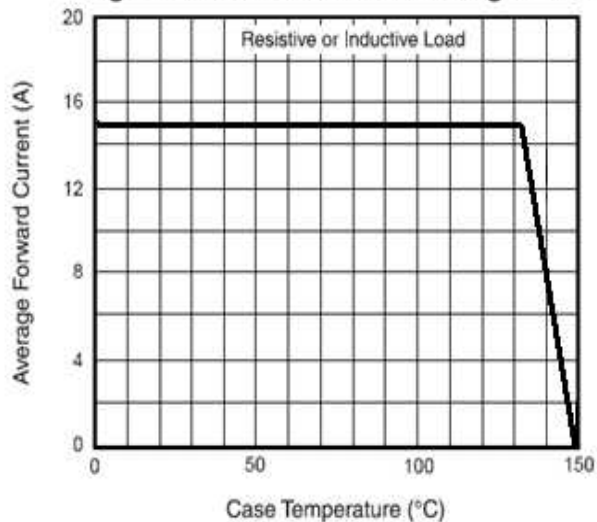
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	SB15100F	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	100	V
Maximum RMS Voltage	V <sub>rms</sub>	70	V
Maximum DC blocking Voltage	V <sub>dc</sub>	100	V
Maximum Average Forward Rectified Current at T <sub>c</sub> =133°C	I <sub>f(av)</sub>	15	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	150	A
Maximum Forward Voltage at 15A	V <sub>f</sub>	0.80	V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	250 6.0	$\mu$ A mA
Typical Thermal Resistance (Note 1)	R <sub>th(jc)</sub>	5.5	°C/W
Operating Junction and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-65 to +150	°C

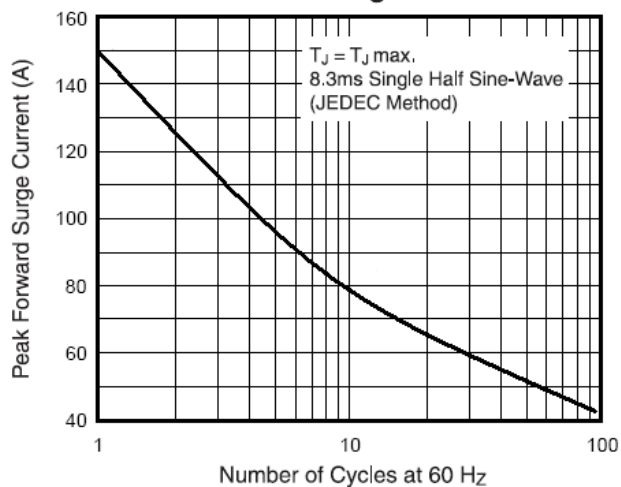
Note:

1. Thermal Resistance from Junction to Case

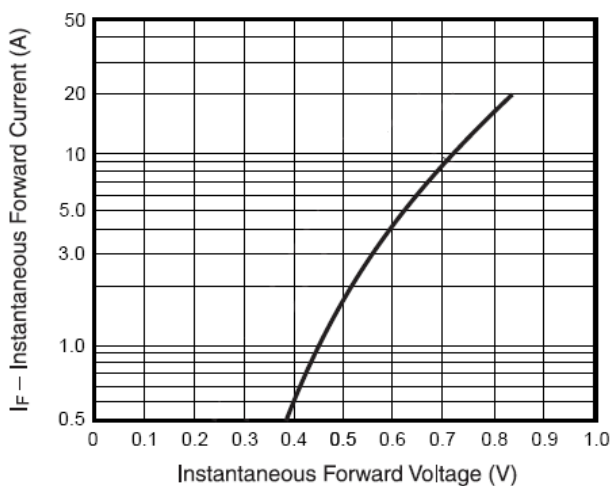
**Fig. 1 - Forward Current Derating Curve**



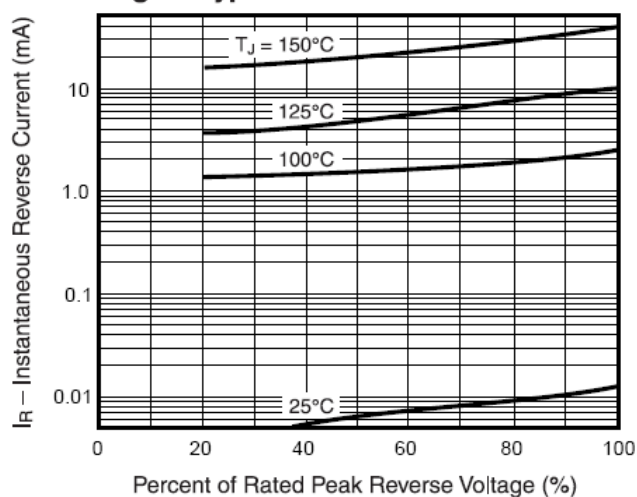
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 - Typical Instantaneous Forward Characteristics**



**Fig. 4 - Typical Reverse Characteristics**



**Fig. 5 - Typical Transient Thermal Impedance**

