

# SB1545FCT

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 45V

CURRENT: 150A

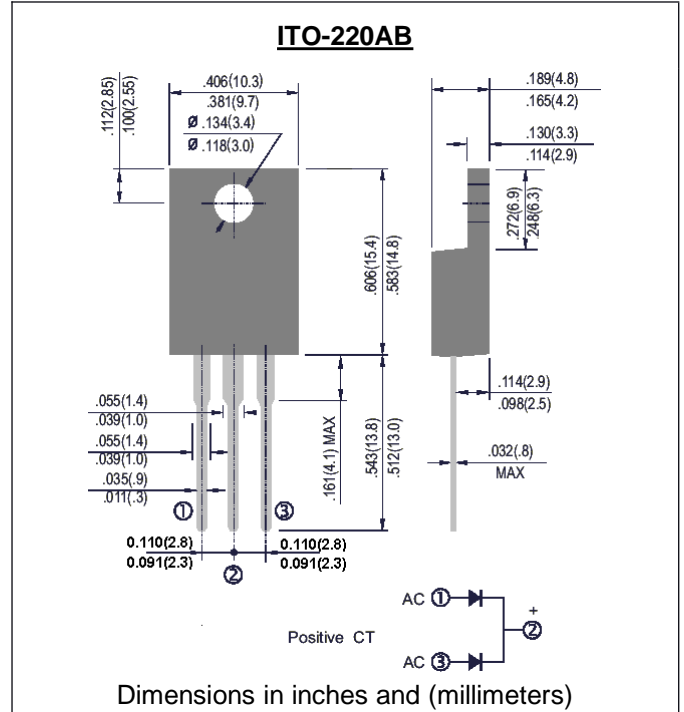


### FEATURE

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

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: Common Cathode  
Mounting position: any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

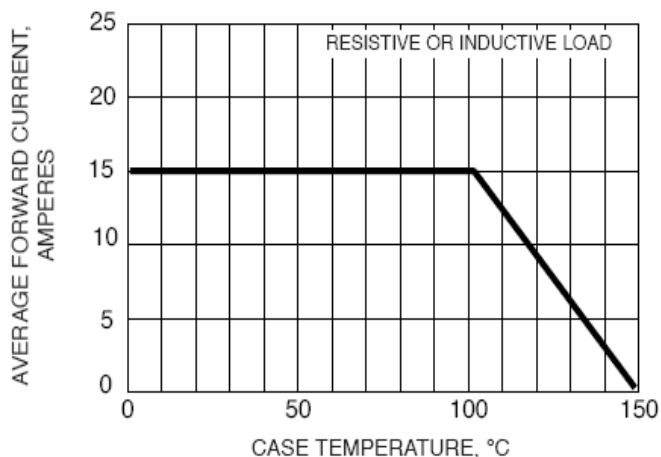
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	SB1545FCT	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	45	V
Maximum RMS Voltage	V <sub>rms</sub>	31.5	V
Maximum DC blocking Voltage	V <sub>dc</sub>	45	V
Maximum Average Forward Rectified Current at T <sub>c</sub> =105°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>	0.84	V
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =125°C	I <sub>r</sub>	0.1 15.0	mA
Typical Thermal Resistance (Note 1)	R <sup>θ</sup> (j/c)	5.0	°C/W
Operating Junction Temperature Range	T <sub>j</sub>	-65 to +150	°C
Storage Temperature Range	T <sub>stg</sub>	-65 to +175	°C

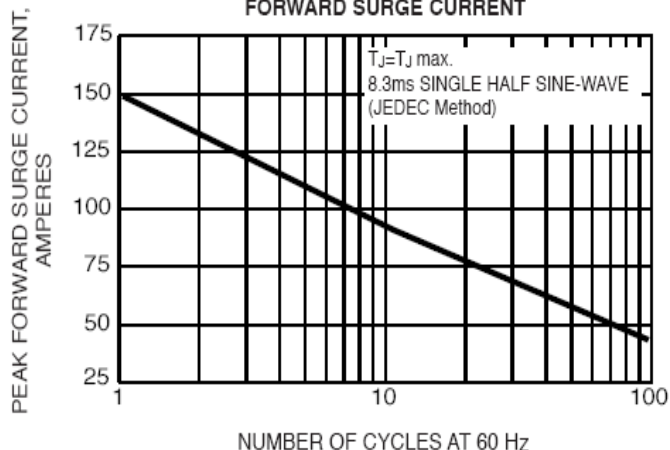
Note:  
1. Thermal Resistance from Junction to Case

# RATINGS AND CHARACTERISTIC CURVES SB1545FCT

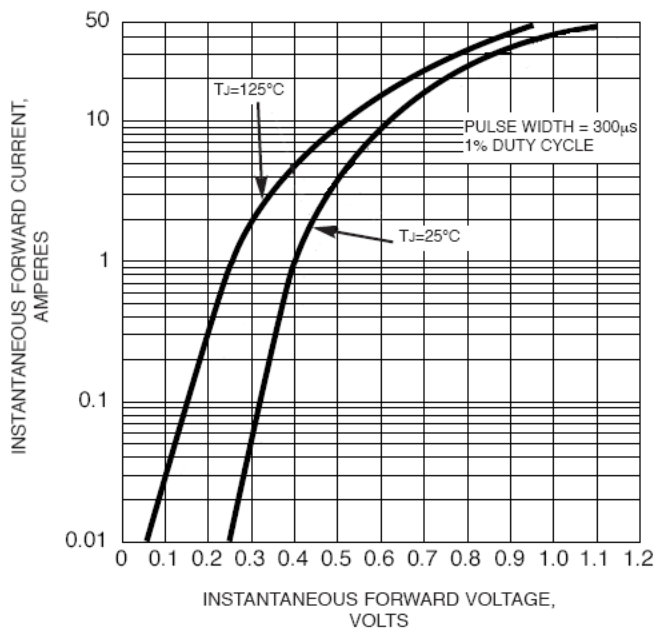
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



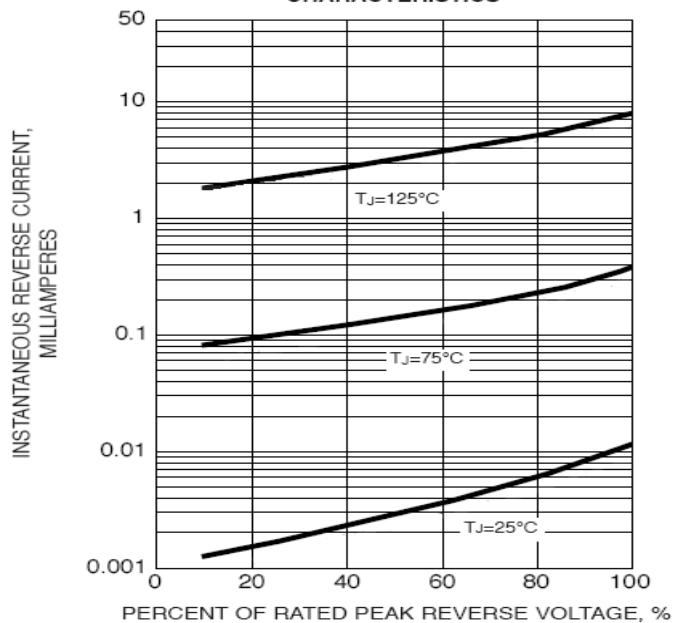
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



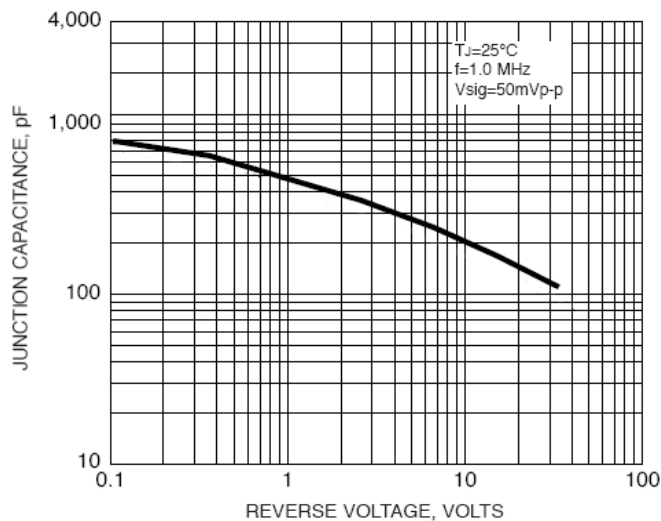
**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG**



**FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG**

