

# SB1545CT

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 45V

CURRENT: 15.0A

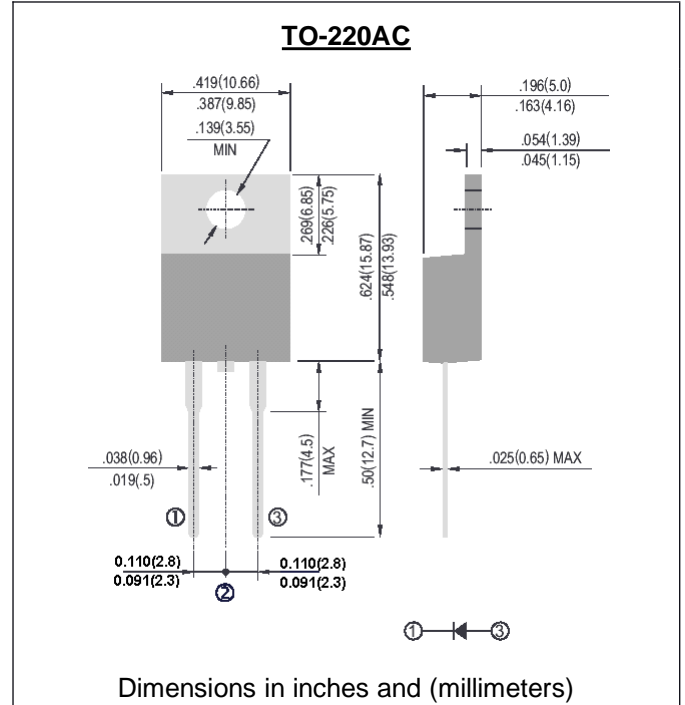


### FEATURE

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

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	SB1545CT	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 per leg	I <sub>fsm</sub>	150	A
Maximum Forward Voltage per leg and 25°C at 7.5A	V <sub>f</sub>	0.84	V
Maximum Reverse Current per leg at working peak reverse voltage	I <sub>r</sub>	0.1 15.0	mA
Typical Thermal Resistance per leg	R <sub>th(jc)</sub>	3.0	°C/W
Operating Junction and Storage Temperature Range	T <sub>j</sub> T <sub>stg</sub>	-65 to +175	°C

Note:  
1. Thermal Resistance from Junction to Case

## RATINGS AND CHARACTERISTIC CURVES SB1545CT

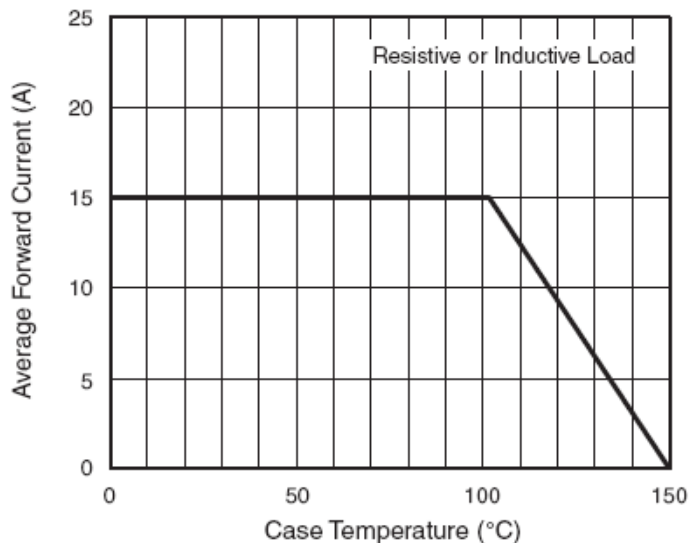


Figure 1. Forward Current Derating Curve

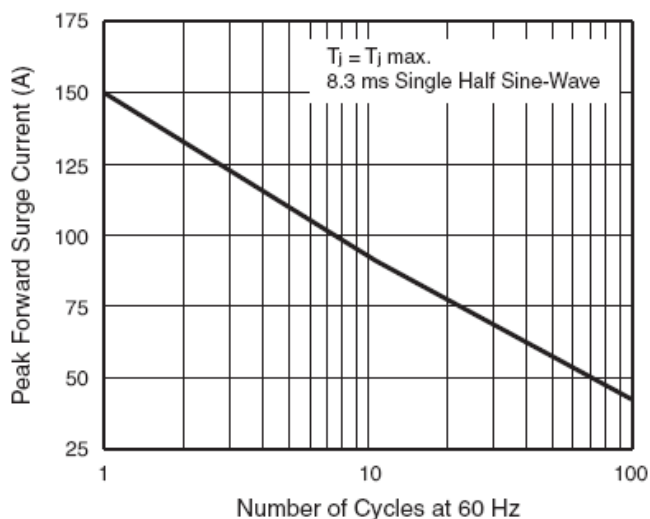


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

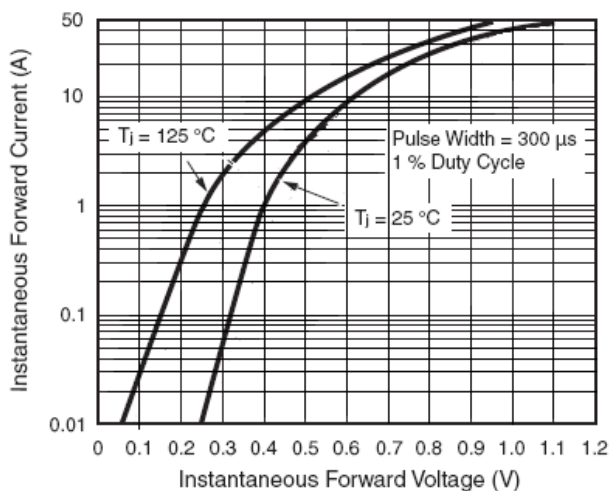


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

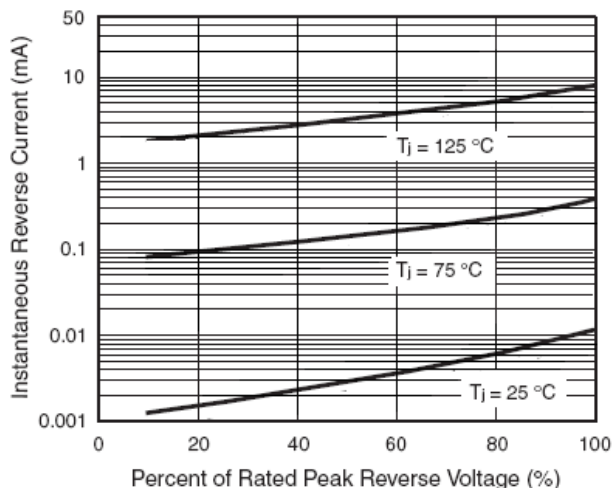


Figure 4. Typical Reverse Characteristics Per Diode

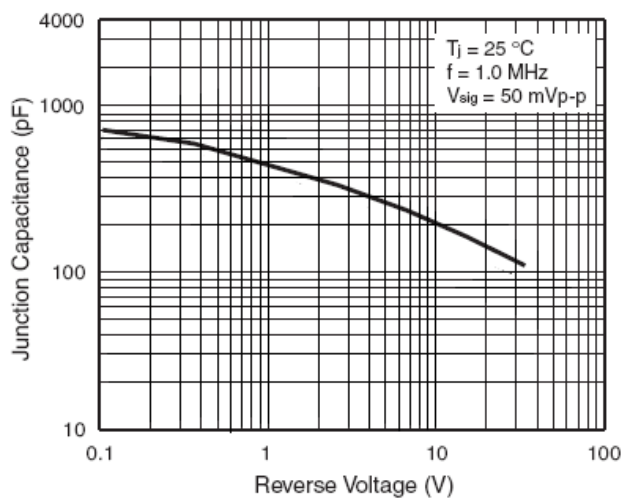


Figure 5. Typical Junction Capacitance Per Diode

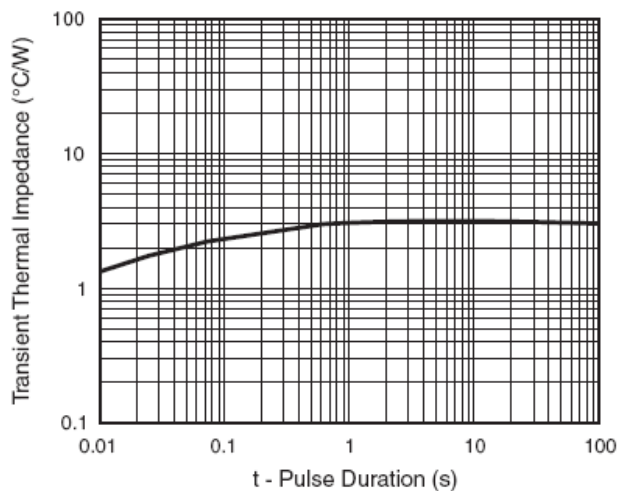


Figure 6. Typical Transient Thermal Impedance Per Diode