

SB10150CT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 150V

CURRENT: 10.0A

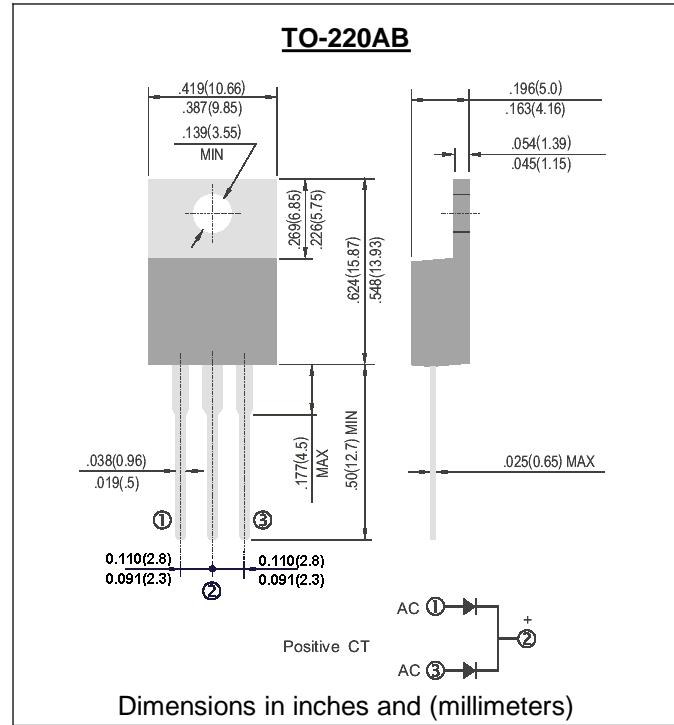


FEATURE

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 | SB10150CT | units |
|---|------------------------------------|-------------|-----------|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 150 | V |
| Maximum RMS Voltage | Vrms | 105 | V |
| Maximum DC blocking Voltage | Vdc | 150 | V |
| Maximum Average Forward Rectified Current | If(av) | 10 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load per leg | Ifsm | 160 | A |
| Maximum Forward Voltage per leg and 25°C at 5A | Vf | 0.88 | V |
| Maximum Reverse Current per leg T _j =25°C at working peak reverse voltage T _j =110°C | Ir | 50 1.0 | µ A mA |
| Typical Thermal Resistance per leg (Note 1) | R _{θ(jc)} | 2.4 | °C/W |
| Operating Junction and Storage Temperature Range | T _j T _{stg} | -65 to +175 | °C |

Note:

1.Thermal Resistance from Junction to Case

RATINGS AND CHARACTERISTIC CURVES SB10150CT

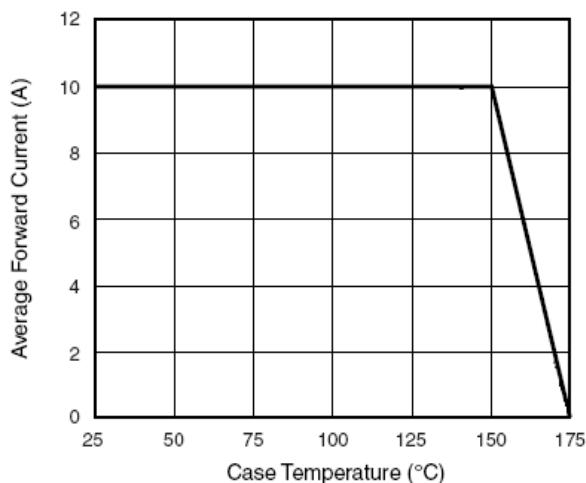


Figure 1. Forward Derating Curve (Total)

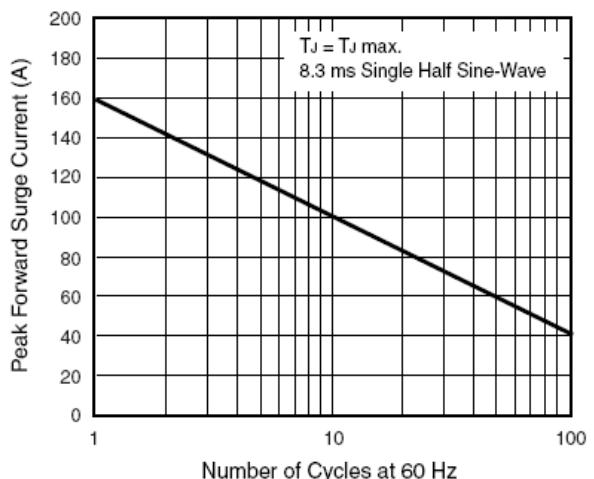


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

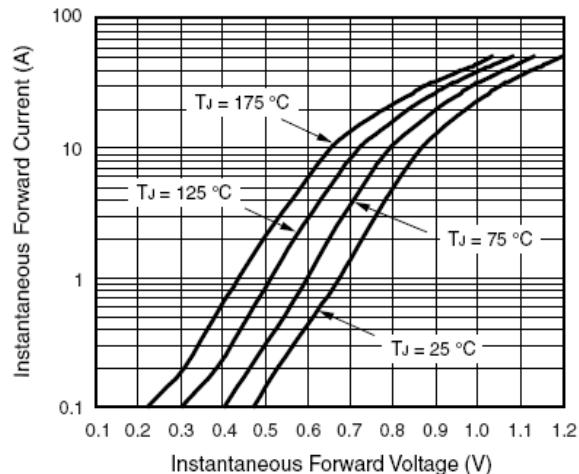


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

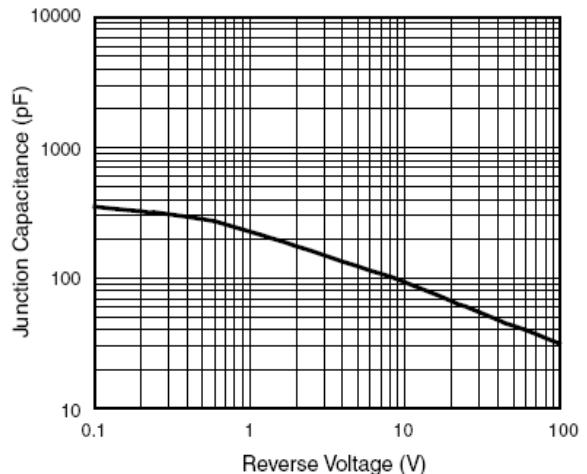


Figure 5. Typical Junction Capacitance Per Diode

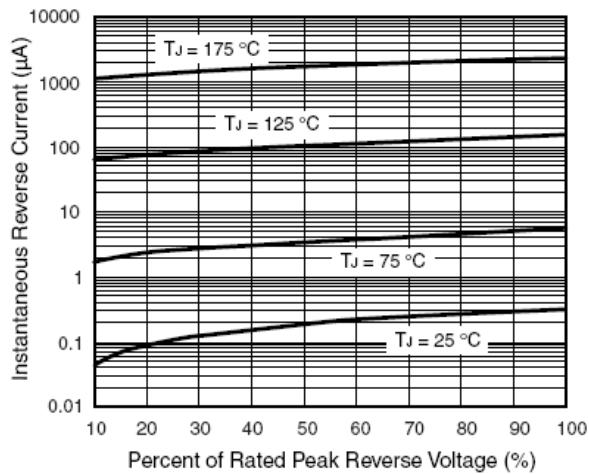


Figure 4. Typical Reverse Characteristics Per Diode

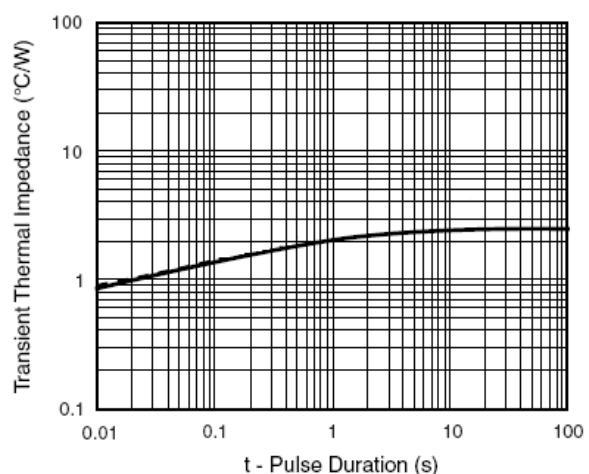


Figure 6. Typical Transient Thermal Impedance Per Diode