

SB10100FCT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 100V

CURRENT: 10.0A



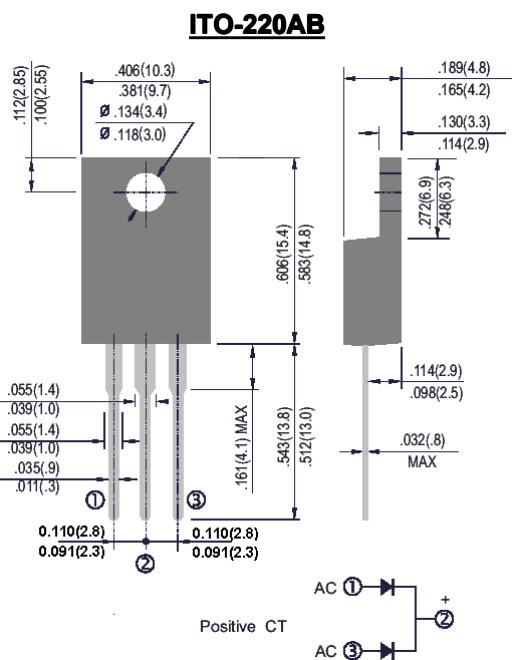
GULF SEMI

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 | SB10100FCT | units |
|--|---------------|-------------------|--------------|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 100 | V |
| Maximum RMS Voltage | Vrms | 70 | V |
| Maximum DC blocking Voltage | Vdc | 100 | V |
| Maximum Average Forward Rectified Current | If(av) | 10 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm | 150 | A |
| Maximum Forward Voltage at 5A | Vf | 0.76 | V |
| Maximum DC Reverse Current at rated DC blocking voltage | Ir | 50 4.5 | µ A mA |
| Typical Thermal Resistance (Note 1) | Rth(jc) | 4.2 | °C/W |
| Operating Junction and Storage Temperature Range | Tj Tstg | -65 to +175 | °C |

Note:

1.Thermal Resistance from Junction to Case

RATINGS AND CHARACTERISTIC CURVES SB10100FCT

Fig. 1 – Forward Derating Curve

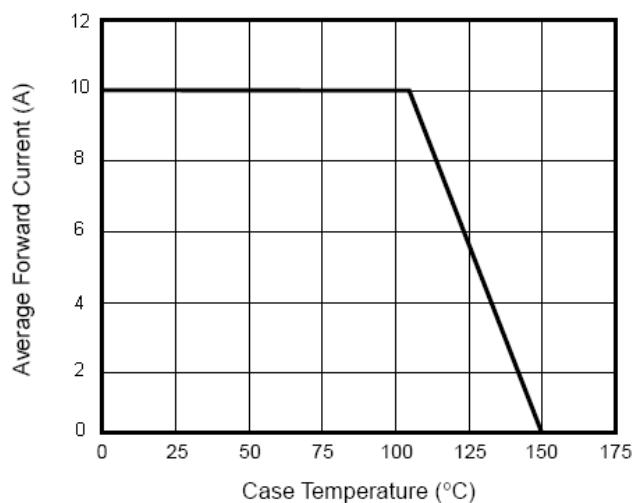


Fig. 3 – Typical Instantaneous Forward Characteristics Per Leg

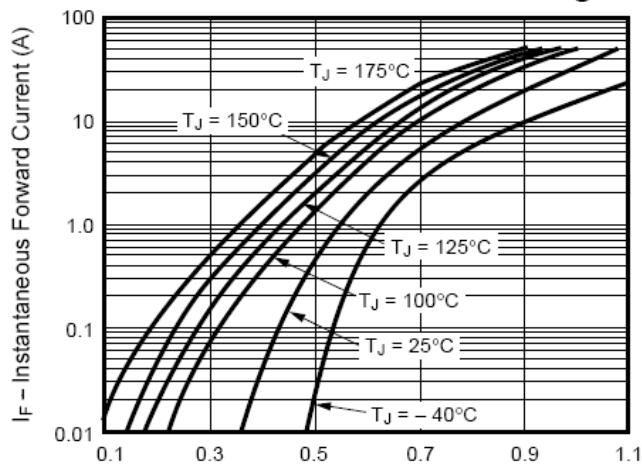


Fig. 5 – Typical Transient Thermal Impedance Per Leg

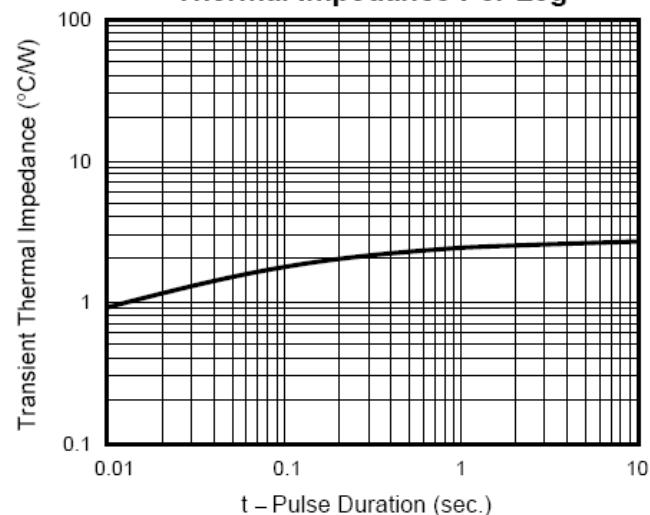


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

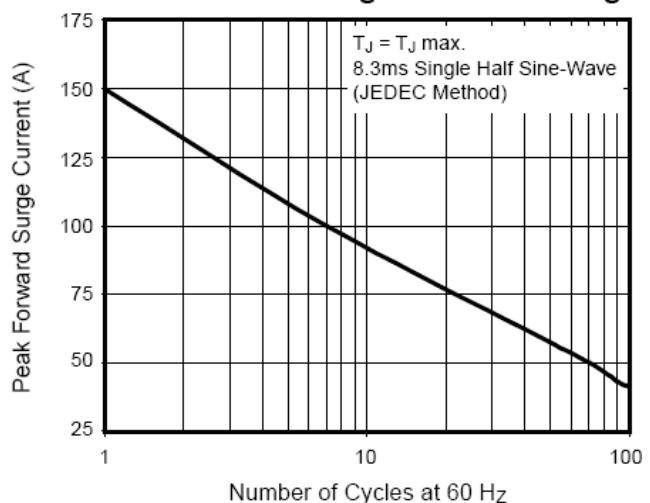


Fig. 4 – Typical Reverse Characteristics Per Leg

