# SB20200FCT

#### SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 200V

CURRENT: 20.0A

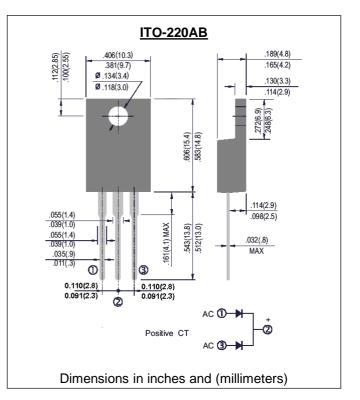
# FEATURE

High current capability, Low forward voltage drop Low power loss, high efficiency High surge capability High temperature soldering guaranteed 250℃ /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	SB20200FCT	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	200	V
Maximum RMS Voltage	Vrms	140	V
Maximum DC blocking Voltage	Vdc	200	V
Maximum Average Forward Rectified Current	lf(av)	20	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	lfsm	290	A
Maximum Forward Voltage at 10A	Vf	0.88	V
Maximum DC Reverse CurrentTa = $25^{\circ}$ Cat rated DC blocking voltageTa = $110^{\circ}$ C	lr	50 1.0	μA mA
Typical Thermal Resistance (Note 1)	Rth(jc)	4.0	°C/W
Operating Junction and Storage Temperature Range	Tj, Tstg	-65 to +175	C

1. Thermal Resistance from Junction to Case

www.gulfsemi.com

#### RATINGS AND CHARACTERISTIC CURVES SB20200FCT

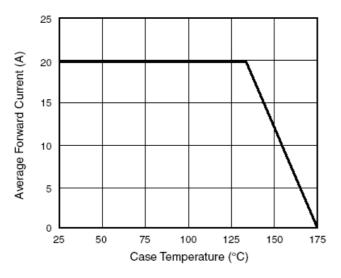


Figure 1. Forward Derating Curve (Total)

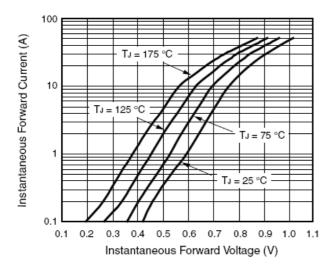


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

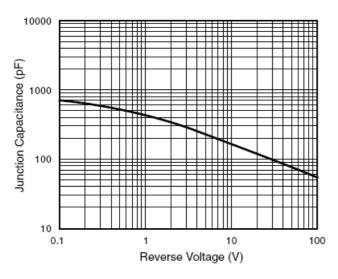


Figure 5. Typical Junction Capacitance Per Diode

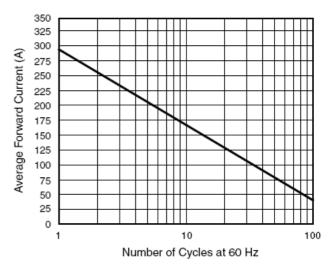


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

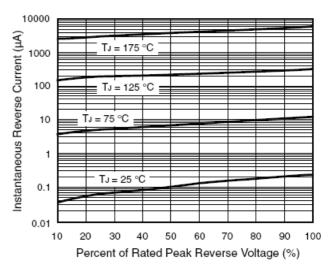


Figure 4. Typical Reverse Characteristics Per Diode

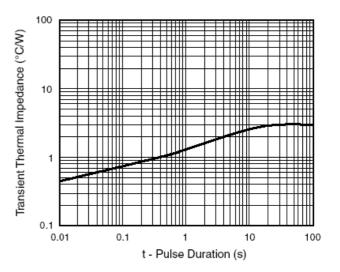


Figure 6. Typical Transient Thermal Impedance Per Diode

www.gulfsemi.com