

SB2045FCT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 45V

CURRENT: 20.0A

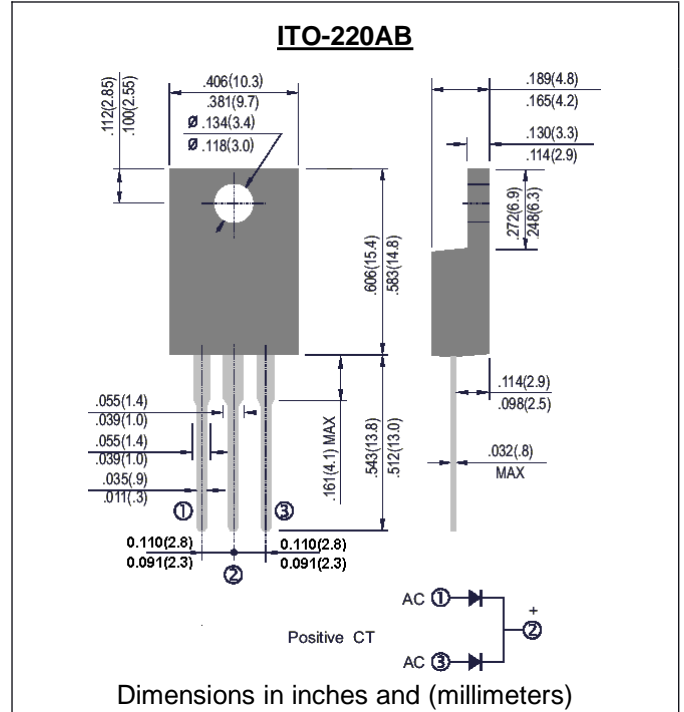


FEATURE

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	SB2045FCT	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	45	V
Maximum RMS Voltage	V _{rms}	31.5	V
Maximum DC blocking Voltage	V _{dc}	45	V
Maximum Average Forward Rectified Current at T _c =135°C	I _{f(av)}	20	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load per leg	I _{fsm}	180	A
Maximum Forward Voltage per leg and 25°C at 10A	V _f	0.57	V
Maximum Reverse Current per leg at working peak reverse voltage	I _r	0.1 15.0	mA
Typical Thermal Resistance per leg	R _{th(jc)}	5.0	°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 SB2045FCT

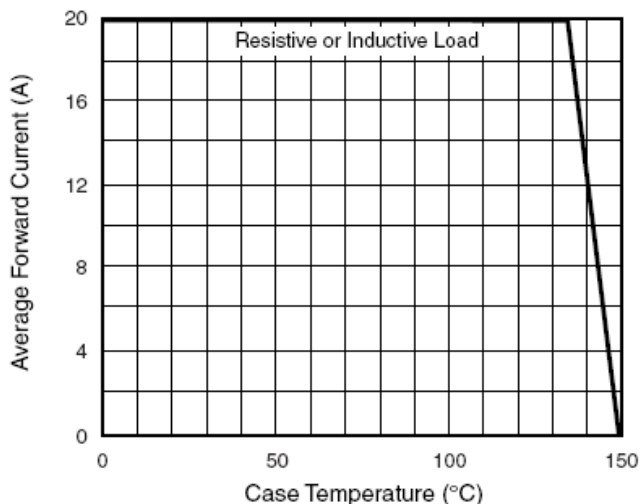


Figure 1. Forward Derating Curve (Total)

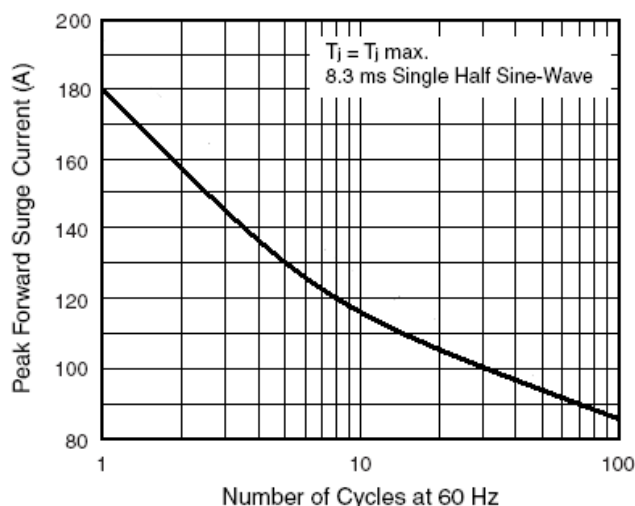


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

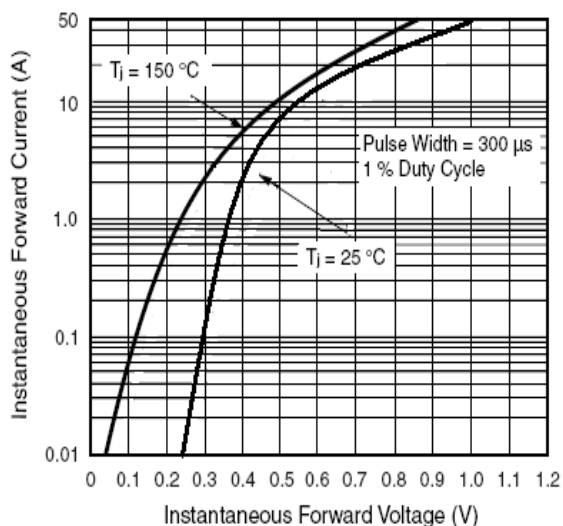


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

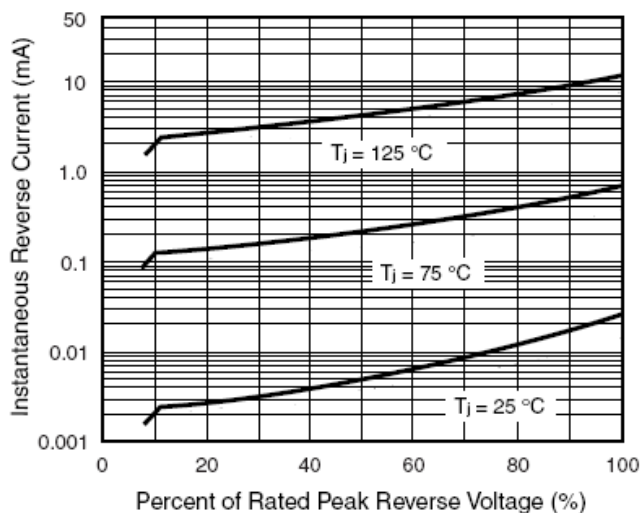


Figure 4. Typical Reverse Characteristics Per Diode

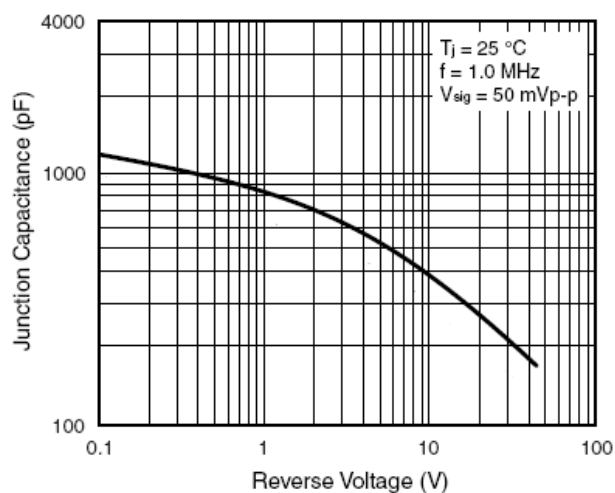


Figure 5. Typical Junction Capacitance Per Diode

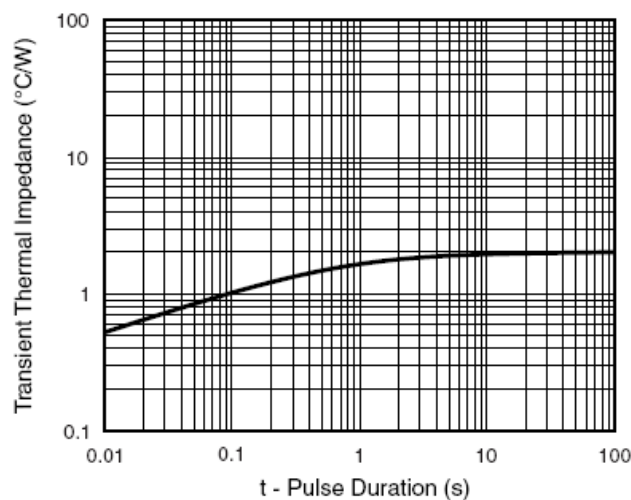


Figure 6. Typical Transient Thermal Impedance Per Diode