SB2045CT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 45V **CURRENT: 20.0A**

GULF SEMI

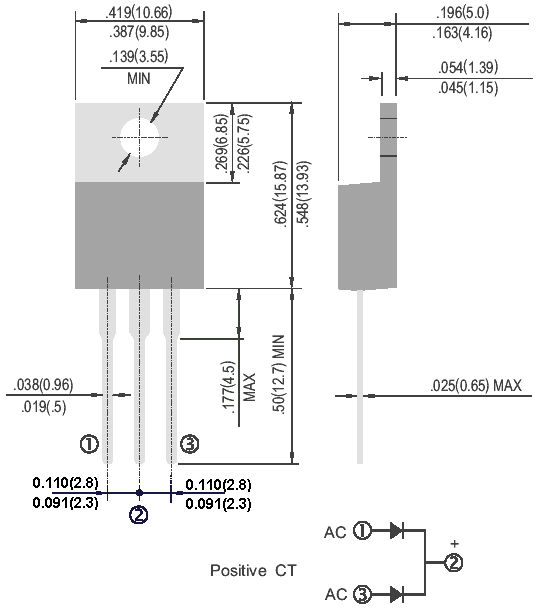
FEATURE

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

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25℃, unless otherwise stated)

	SYMBOL	SB2045CT	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	45	V
Maximum RMS Voltage	Vrms	31.5	V
Maximum DC blocking Voltage	Vdc	45	V
Maximum Average Forward Rectified Current at Tc=135℃	If(av)	20	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load per leg	Ifsm	180	A
Maximum Forward Voltage per leg and 25°C at 10A	Vf	0.57	V
Maximum Reverse Current per leg Tj =25℃ at working peak reverse voltage Tj =125℃	Ir	0.1 15.0	mA
Typical Thermal Resistance per leg (Note 1)	Rth(jc)	2.0	℃/W
Operating Junction and Storage Temperature Ramge	Tj Tstg	-65 to +175	℃

Note:
1.Thermal Resistance from Junction to Case

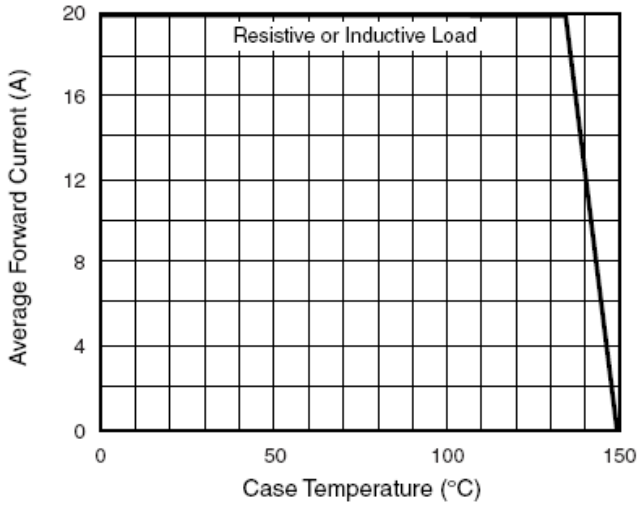


Figure 1. Forward Derating Curve (Total)

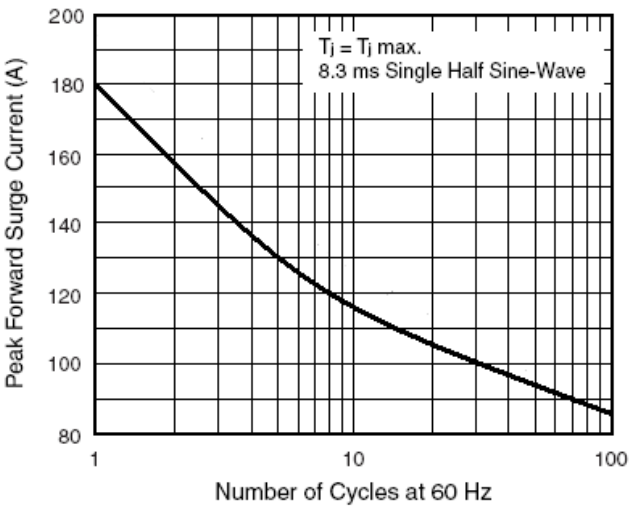


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

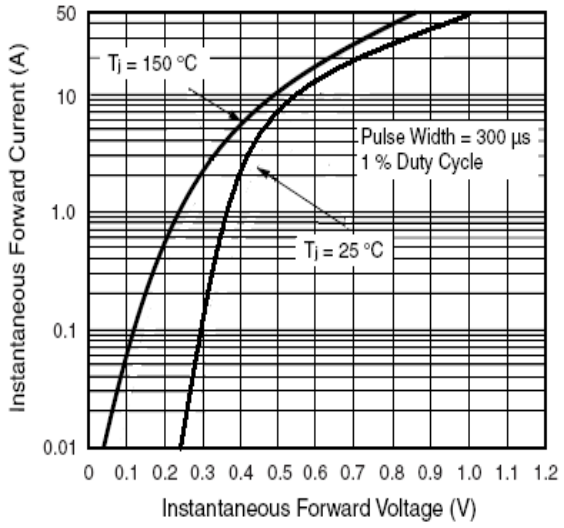


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

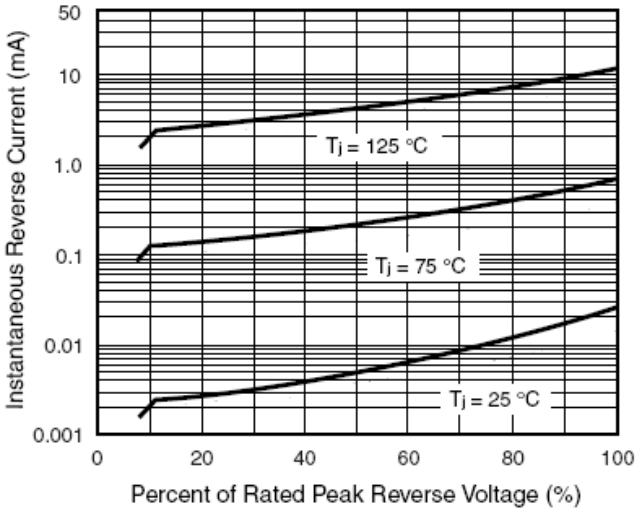


Figure 4. Typical Reverse Characteristics Per Diode

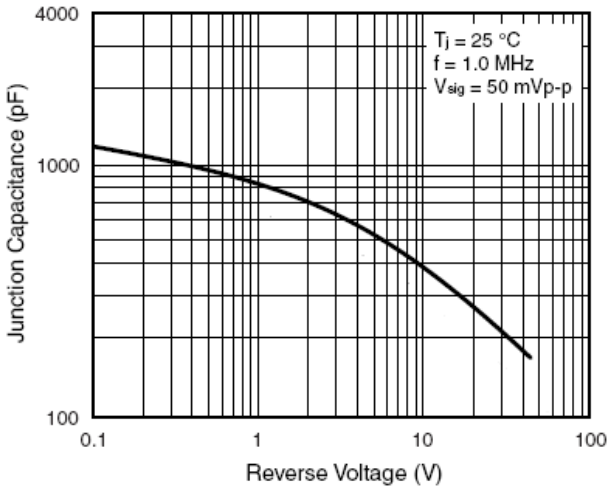


Figure 5. Typical Junction Capacitance Per Diode

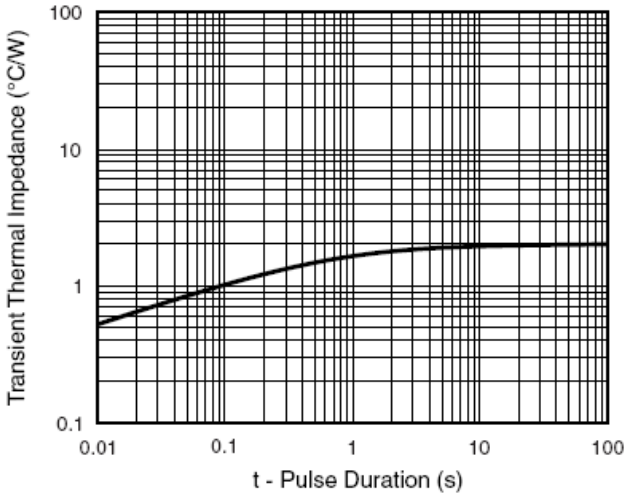


Figure 6. Typical Transient Thermal Impedance Per Diode