

SB1045CT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 45V

CURRENT: 10.0A

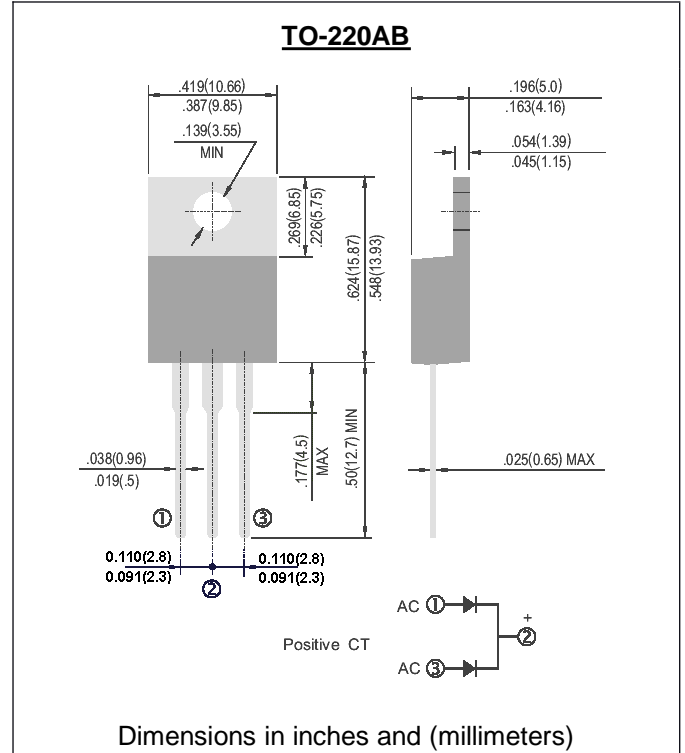


FEATURE

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	SB1045CT	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)}	10	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load per leg	I _{fsm}	150	A
Maximum Forward Voltage per leg and 25°C at 5A	V _f	0.53	V
Maximum Reverse Current per leg at working peak reverse voltage	I _r	0.1 6.0	mA
Typical Thermal Resistance per leg (Note 1)	R _{th(jc)}	3.0	°C/W
Operating Junction and Storage Temperature Range	T _j , T _{stg}	-65 to +150	°C

Note:

1. Thermal Resistance from Junction to Case

Fig. 1 – Forward Derating Curve

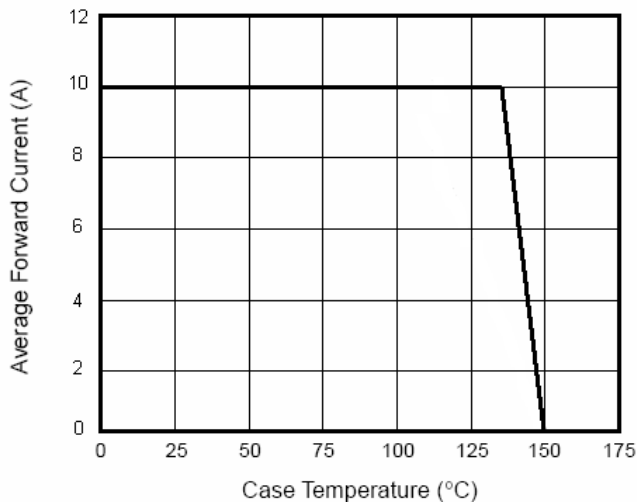


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

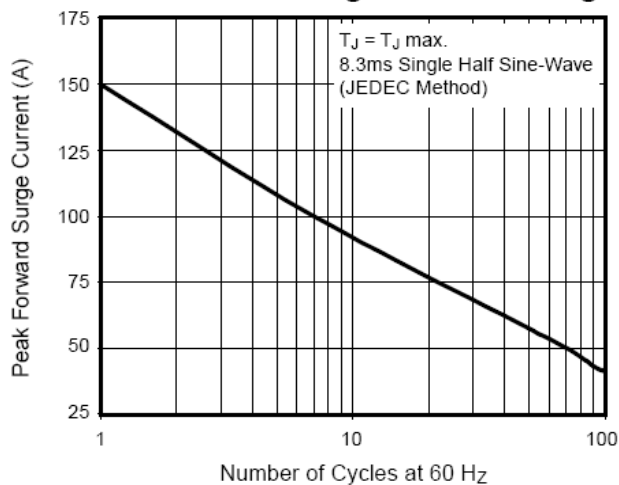


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

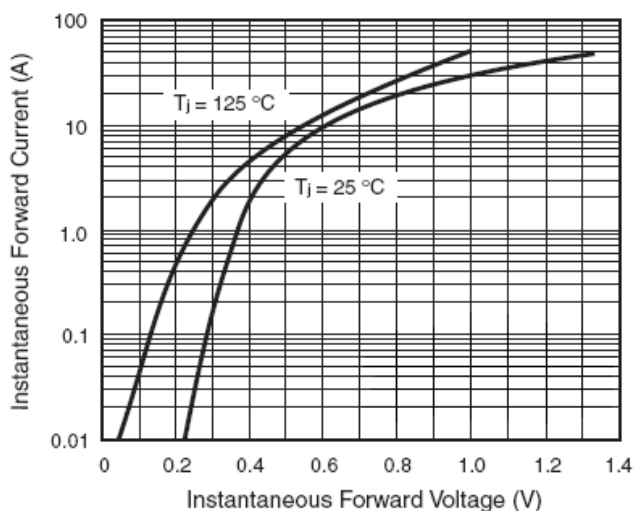


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

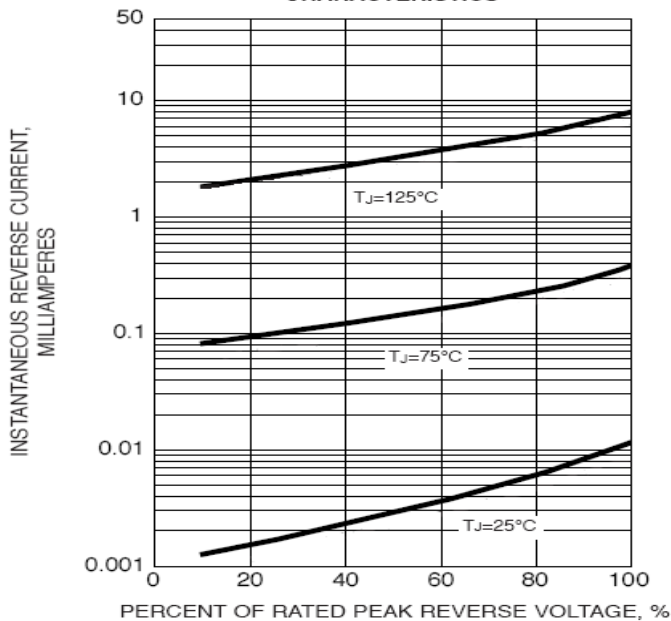


Fig. 5 – Typical Junction Capacitance Per Leg

