

Pb Free Plating Product

SB20100CT



20.0 Ampere Dual Common Cathode Schottky Barrier Rectifiers

## Features

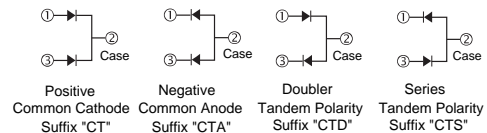
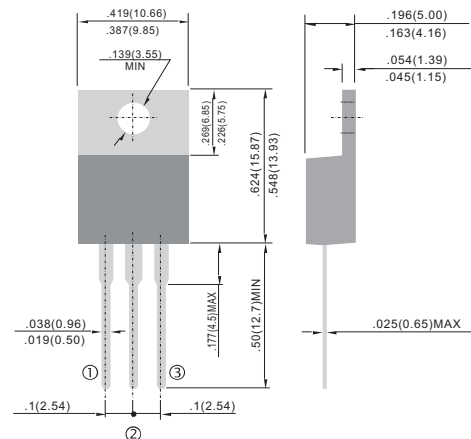
- ◇ Plastic material used carries Underwriters Laboratory Classifications 94V-0
- ◇ Metal silicon junction, majority carrier conduction
- ◇ Low power loss, high efficiency
- ◇ High current capability, low forward voltage drop
- ◇ High surge capability
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◇ Guardring for overvoltage protection
- ◇ High temperature soldering guaranteed:  
260°C/10 seconds, 0.25" (6.35mm) from case

## Mechanical Data

- ◇ Cases: JEDEC TO-220AB heat sink
- ◇ Terminals: Pure tin plated, lead free. solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Mounting position: Any
- ◇ Mounting torque: 5 in. - lbs. max
- ◇ Weight: 2.1 gram approximately

TO-220AB

Unit : inch (mm)



## Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

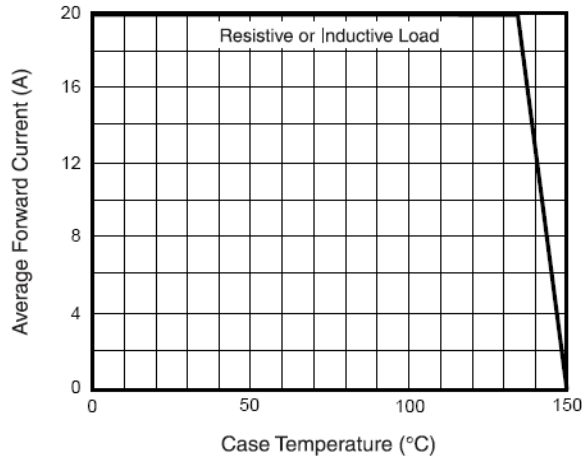
For capacitive load, derate current by 20%

	SYMBOL	SB20100CT	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	100	V
Maximum RMS Voltage	V <sub>rms</sub>	70	V
Maximum DC blocking Voltage	V <sub>dc</sub>	100	V
Maximum Average Forward Rectified Current at T <sub>c</sub> =133°C	I <sub>f(av)</sub>	20	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	150	A
Maximum Forward Voltage at 10A	V <sub>f</sub>	0.80	V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	100 6.0	μ A mA
Typical Thermal Resistance (Note 1)	R <sub>th(jc)</sub>	2.0	°C/W
Operating Junction and Storage Temperature Range	T <sub>j</sub> T <sub>stg</sub>	-65 to +150	°C

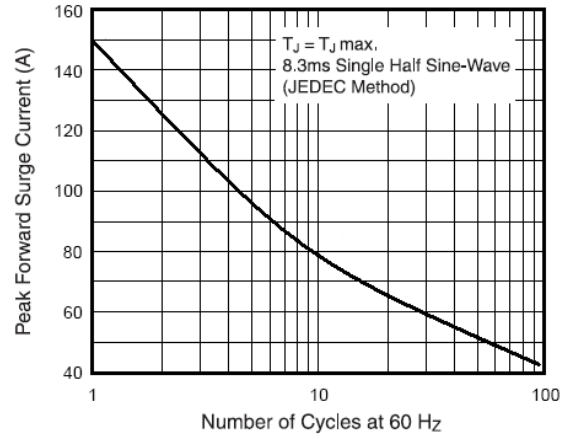
Note:

1. Thermal Resistance from Junction to Case

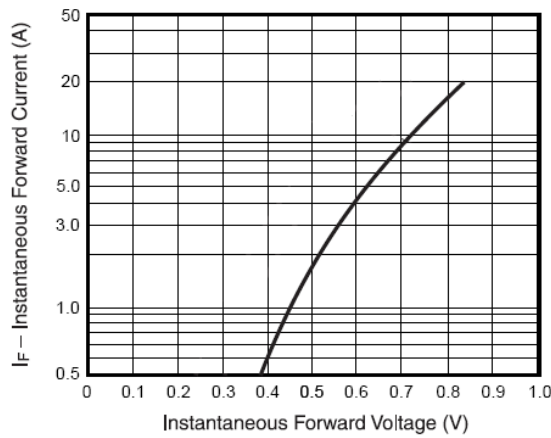
**Fig. 1 - Forward Current Derating Curve**



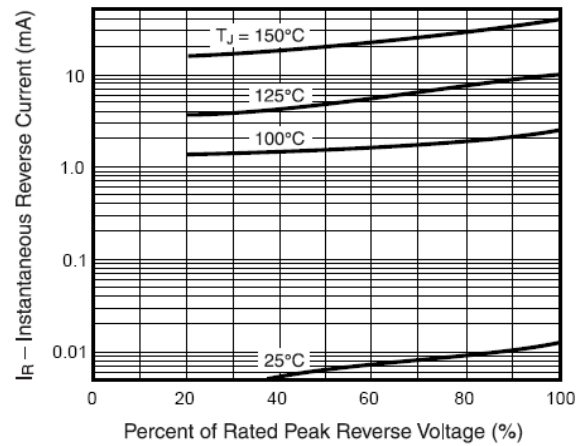
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 - Typical Instantaneous Forward Characteristics**



**Fig. 4 - Typical Reverse Characteristics**



**Fig. 5 - Typical Transient Thermal Impedance**

