



Pb Free Plating Product

SB20100CT

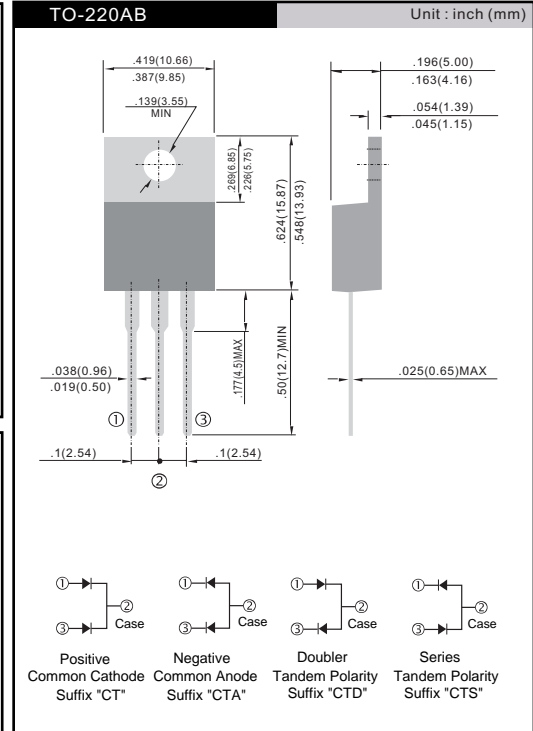
20.0 Ampere Dual Common Cathode Schottky Barrier Rectifiers

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



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 _{rrm}	100	V
Maximum RMS Voltage	V _{rms}	70	V
Maximum DC blocking Voltage	V _{dc}	100	V
Maximum Average Forward Rectified Current at T _c =133°C	I _{f(av)}	20	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	150	A
Maximum Forward Voltage at 10A	V _f	0.80	V
Maximum DC Reverse Current at rated DC blocking voltage	I _r	100 6.0	μ A mA
Typical Thermal Resistance (Note 1)	R _{th(jc)}	2.0	°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 Current Derating Curve

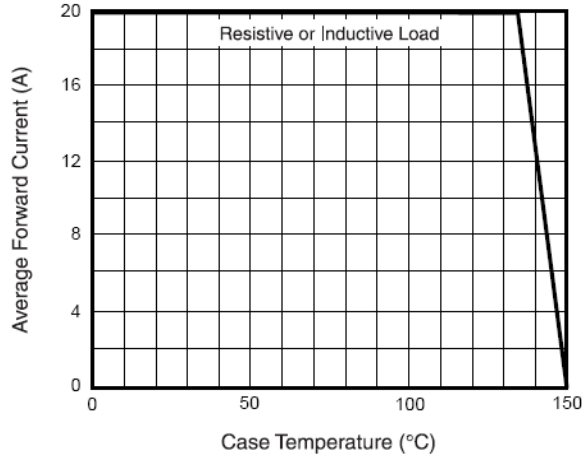


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

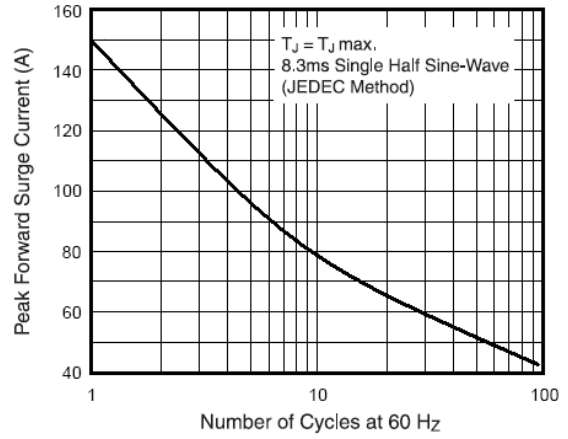


Fig. 3 - Typical Instantaneous Forward Characteristics

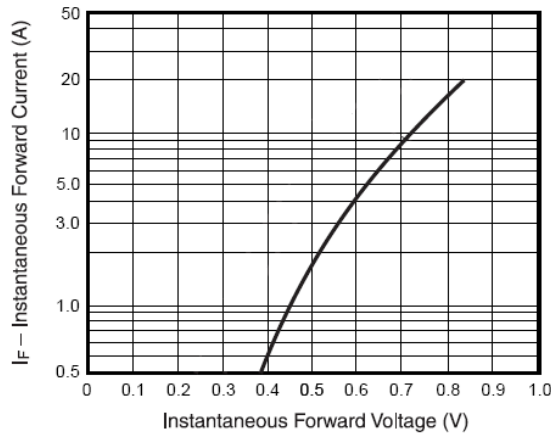


Fig. 4 - Typical Reverse Characteristics

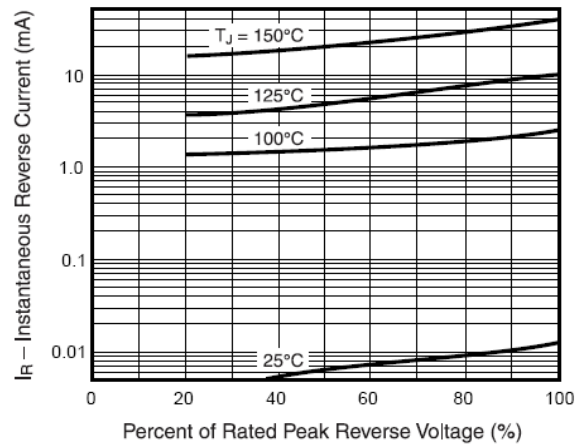


Fig. 5 - Typical Transient Thermal Impedance

