



DATA SHEET

SB2020CT~SB20200CT

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 200 Volts **CURRENT** 20 Amperes

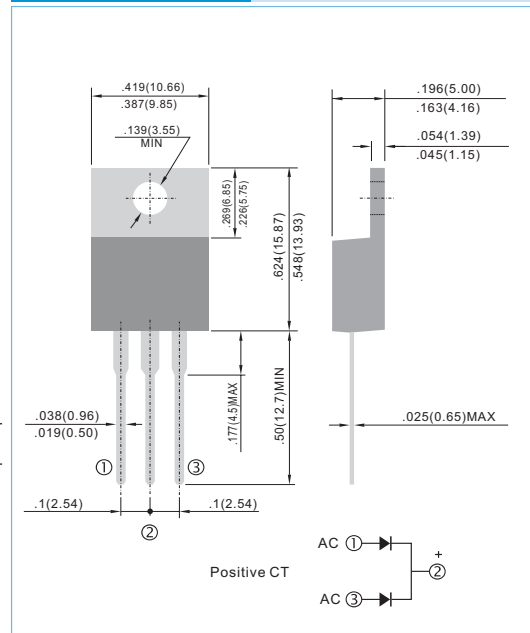
TO-220AB Unit : inch (mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: TO-220AB Molded plastic
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity: As marked.
 Standard packaging: Any
 Weight: 0.08 ounces, 2.24grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%

PARAMETER	SYMBOL	SB2020CT	SB2030CT	SB2040CT	SB2045CT	SB2050CT	SB2060CT	SB2080CT	SB20100CT	SB20150CT	SB20200CT	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	31	35	42	56	70	105	140	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	V	
Maximum Average Forward Current .375" (9.5mm) lead length at $T_c = 90^\circ C$	I_{AV}	20.0										A	
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	200										A	
Maximum Forward Voltage at 10.0A, per leg	V_F	0.55			0.75		0.85		0.92		1	V	
Maximum DC Reverse Current $T_A = 25^\circ C$ at Rated DC Blocking Voltage $T_A = 100^\circ C$	I_R	0.5					100						mA
Typical Thermal Resistance	$R_{\theta JC}$	2										$^\circ C / W$	
Operating Junction Temperature Range	T_J	-50 TO +125										$^\circ C$	
Storage Temperature Range	T_{STG}	-50 TO +150										$^\circ C$	

Note.
 Both Bonding and Chip structure are available.



RATING AND CHARACTERISTIC CURVES

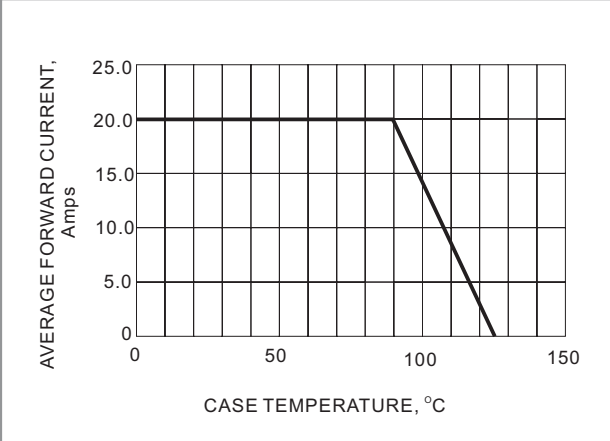


Fig.1- FORWARD CURRENT DERATING CURVE

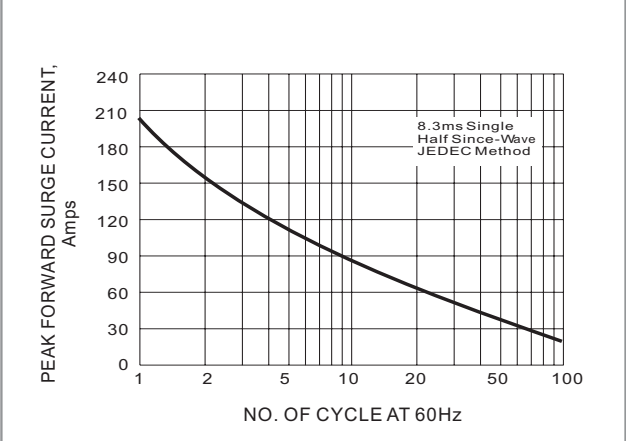


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

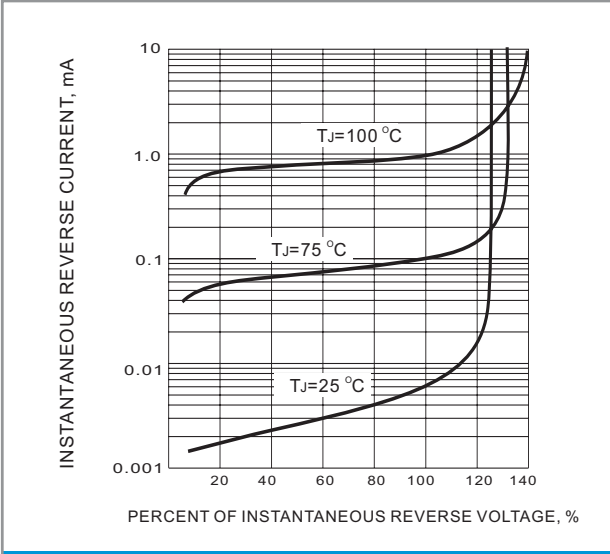


Fig.3- TYPICAL REVERSE CHARACTERISTICS

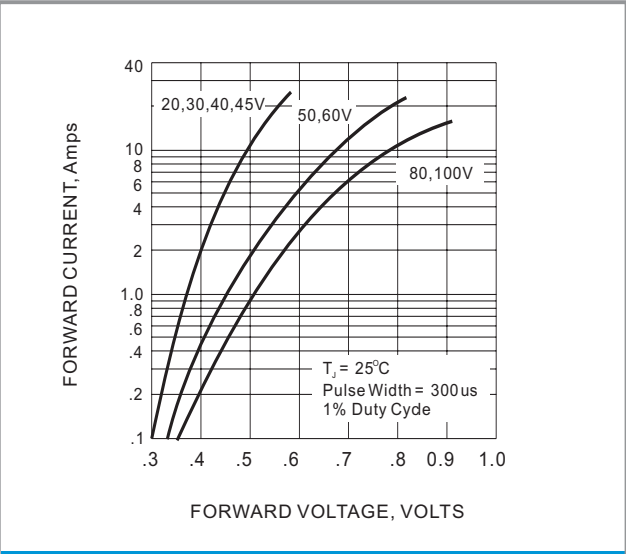


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS