



# DATA SHEET

## SB2020FCT~SB20200FCT

### ISOLATION SCHOTTKY BARRIER RECTIFIERS

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

ITO-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 : Sn can meet RoHS environment substance directive request

#### MECHANICAL DATA

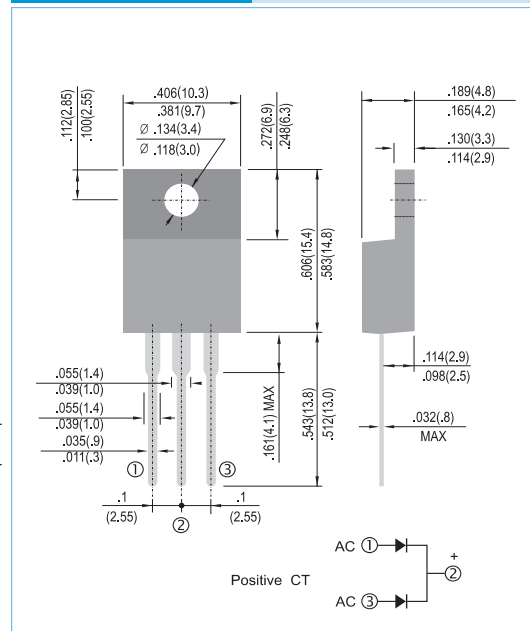
Case: ITO-220AB Molded plastic

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%

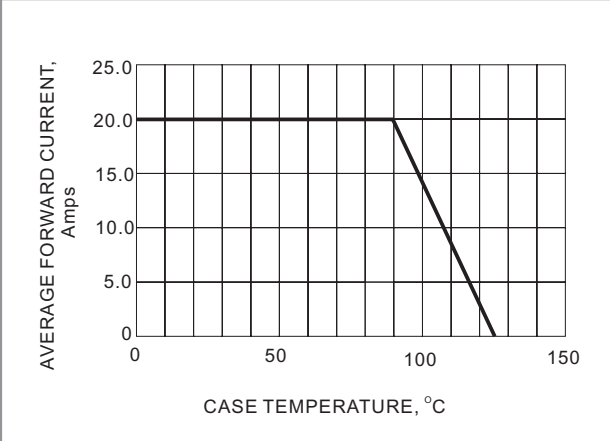
PARAMETER	SYMBOL	SB2020 FCT	SB2030 FCT	SB2040 FCT	SB2045 FCT	SB2050 FCT	SB2060 FCT	SB2080 FCT	SB20100 FCT	SB20150 FCT	SB20200 FCT	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	31.5	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	45	50	60	80	100	150	200	V
Maximum Average Forward Current .375"(9.5mm) lead length at T <sub>c</sub> =90 °C	I <sub>AV</sub>	20.0										A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	200										A
Maximum Forward Voltage at 10.0A, per leg	V <sub>F</sub>	0.55			0.75		0.85		0.92		1	V
Maximum DC Reverse Current T <sub>A</sub> =25 °C at Rated DC Blocking Voltage T <sub>A</sub> =100°C	I <sub>R</sub>	0.5					100					mA
Typical Thermal Resistance	R <sub>θJC</sub>	2										°C / W
Operating Junction Temperature Range	T <sub>J</sub>	-50 TO +125										°C
Storage Temperature Range	T <sub>STG</sub>	-50 TO +150										°C

Note.

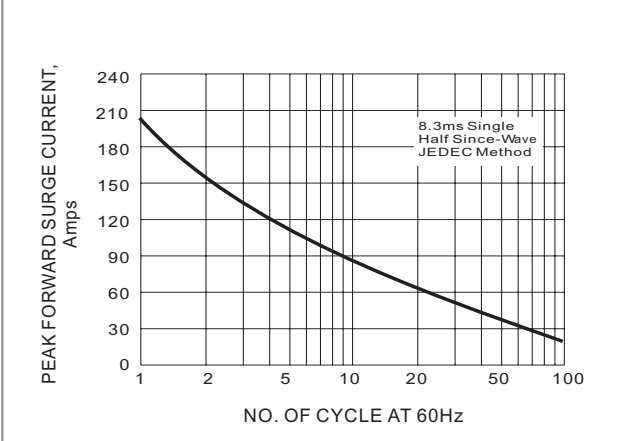
Both Bonding and Chip structure are available.



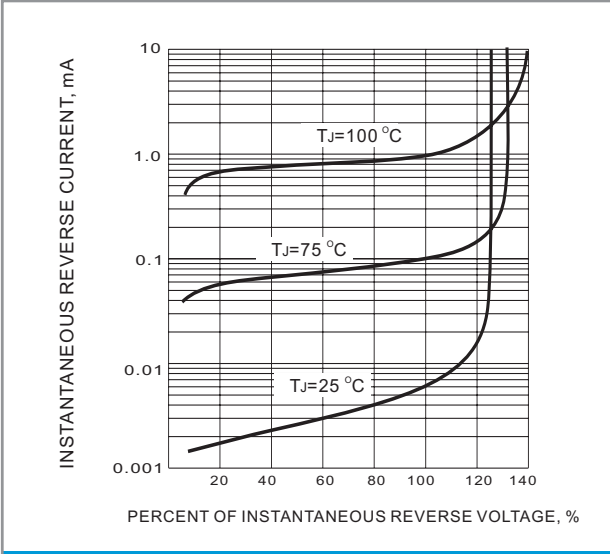
**RATING AND CHARACTERISTIC CURVES**



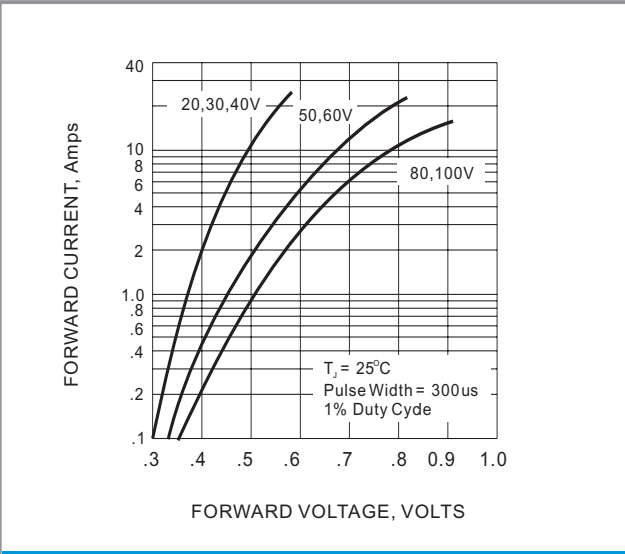
**Fig. 1- FORWARD CURRENT DERATING CURVE**



**Fig. 2- MAXIMUM NON - REPETITIVE SURGE CURRENT**



**Fig. 3- TYPICAL REVERSE CHARACTERISTICS**



**Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**