



DATA SHEET

SB2020FCT~SB20100FCT

ISOLATION SCHOTTKY BARRIER RECTIFIERS

VOLTAGE- 20 to 100 Volts CURRENT - 20.0 Ampere

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.

MECHANICAL DATA

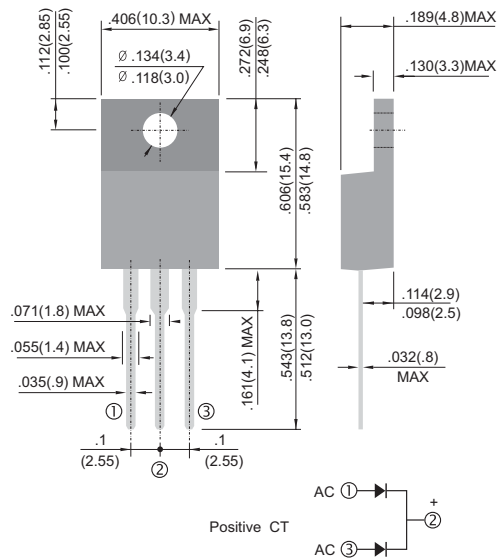
Case: ITO-220AB Molded plastic

Terminals: Solder plated, solderable per MIL-STD-202, Method 208

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%

| | SB2020FCT | SB2030FCT | SB2040FCT | SB2050FCT | SB2060FCT | SB2080FCT | SB20100FCT | UNIT |
|--|-------------|-----------|-----------|------------|-----------|-----------|------------|------|
| Maximum Recurrent Peak Reverse Voltage | 20.0 | 30.0 | 40.0 | 50.0 | 60.0 | 80.0 | 100.0 | V |
| Maximum RMS Voltage | 14.0 | 21.0 | 28.0 | 35.0 | 42.0 | 56.0 | 70.0 | V |
| Maximum DC Blocking Voltage | 20.0 | 30.0 | 40.0 | 50.0 | 60.0 | 80.0 | 100.0 | V |
| Maximum Average Forward Rectified Current at Tc=90°C | 20 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 150 | | | | | | | A |
| Maximum Instantaneous Forward Voltage at 10.0A per element | 0.55 | | | 0.75 | | | 0.85 | v |
| Maximum DC Reverse Current (Note 1) Ta=25°C at Rated DC Blocking Voltage Ta=100°C | | | | 0.5 100 | | | | mA |
| Typical Thermal Resistance Note RθJA | 100 | | | | | | | °C/W |
| Operating and Storage Temperature Range T _J | -50 to +125 | | | | | | | °C |

NOTES:

1. Thermal Resistance Junction to Ambient .



RATING AND CHARACTERISTIC CURVES

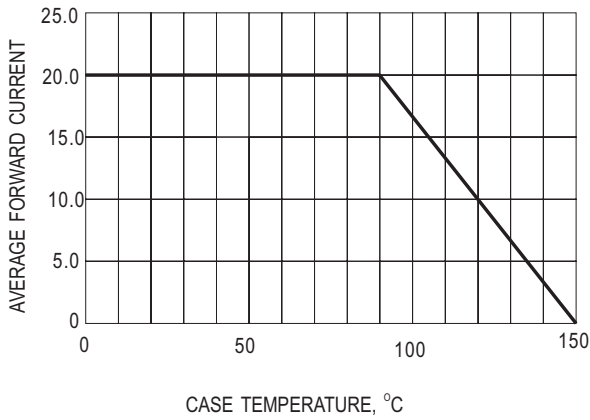


Fig.1- FORWARD CURRENT DERATING CURVE

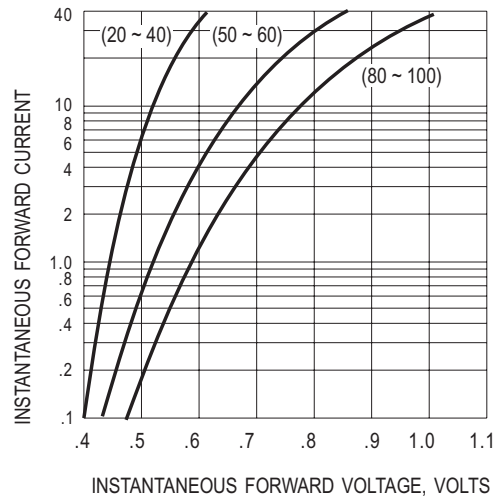


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

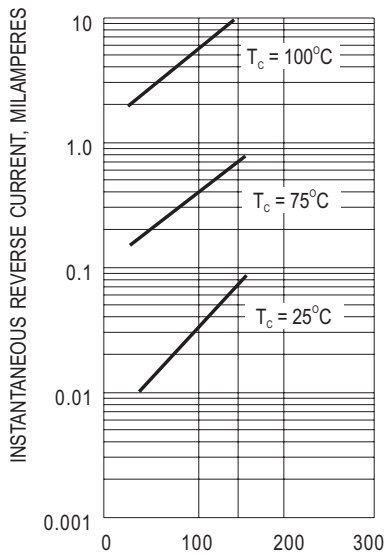


Fig.3- TYPICAL REVERSE CHARACTERISTIC

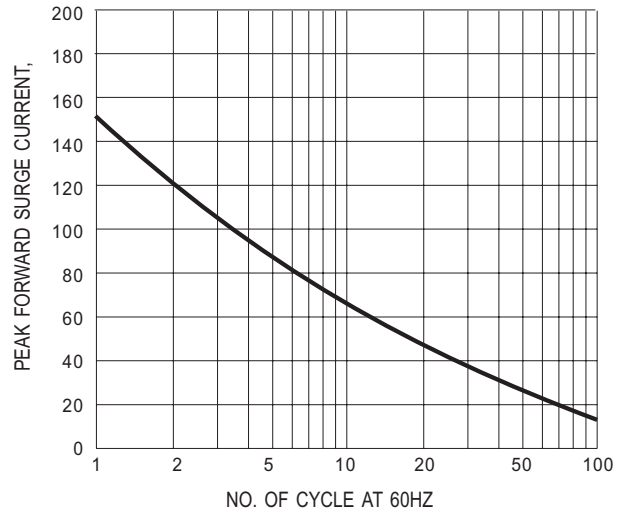


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

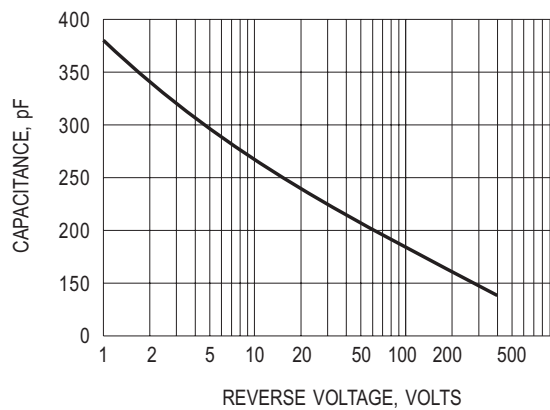


Fig.5- TYPICAL JUNCTION CAPACITANCE