



DATA SHEET

SB620F~SB660F

ISOLATION SCHOTTKY BARRIER RECTIFIERS
VOLTAGE 20 to 60 Volts CURRENT - 6 Ampere

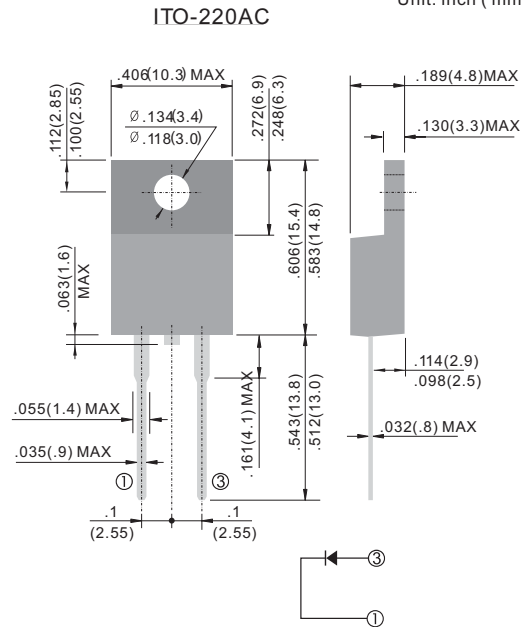
Unit: inch (mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing 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-220AC full molded plastic package
Terminals: Lead solderable per MIL-STD-202, Method 208
Polarity: As marked.
Mounting Position: 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%

| | SB620F | SB630F | SB640F | SB650F | SB660F | UNITS |
|--|-------------|--------|--------|--------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage | 20 | 30 | 40 | 50 | 60 | V |
| Maximum RMS Voltage | 14 | 21 | 28 | 35 | 42 | V |
| Maximum DC Blocking Voltage | 20 | 30 | 40 | 50 | 60 | V |
| Maximum Average Forward Rectified Current at Tc=75°C | 6.0 | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 75 | | | | | A |
| Maximum Forward Voltage at 6.0A per element | 0.55 | | 0.70 | | | V |
| Maximum DC Reverse Current at Tc=25°C | 0.1 | | | | | mA |
| DC Blocking Voltage per element Tc=100°C | 15 | | | | | |
| Typical Thermal Resistance Note RθJC | 6.0 | | | | | °C/W |
| RθJA | 80 | | | | | |
| Operating and Storage Temperature Range | -50 to +125 | | | | | °C |
| Storage Temperature Range | -50 to +150 | | | | | °C |

NOTES:

1. Thermal Resistance Junction to Ambient .



RATING AND CHARACTERISTIC CURVES

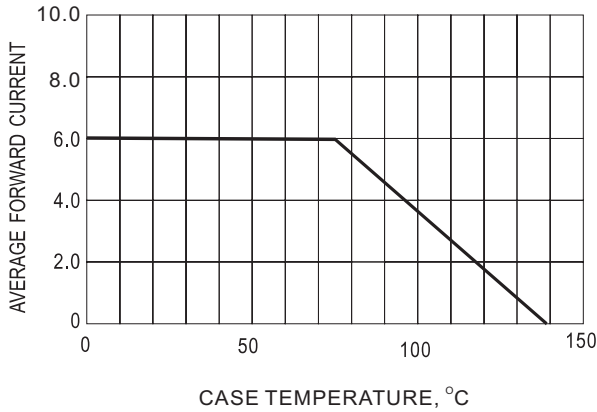


Fig. 1- FORWARD CURRENT DERATING CURVE

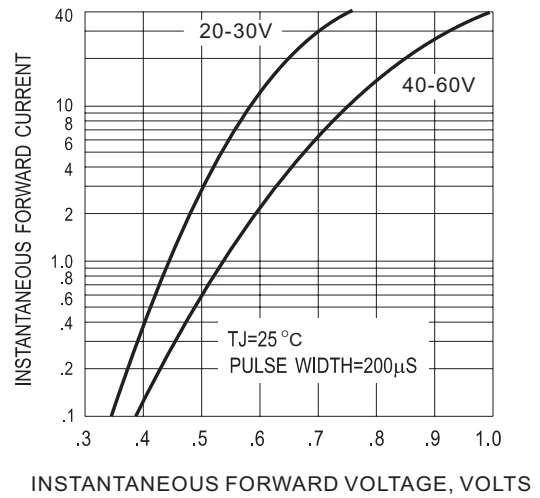


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

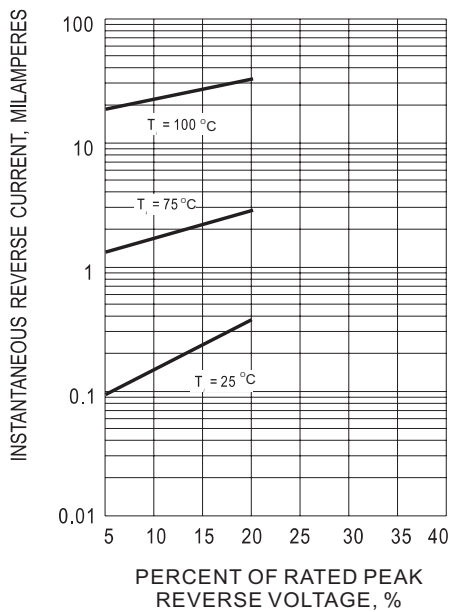


Fig. 3- TYPICAL REVERSE CHARACTERISTIC

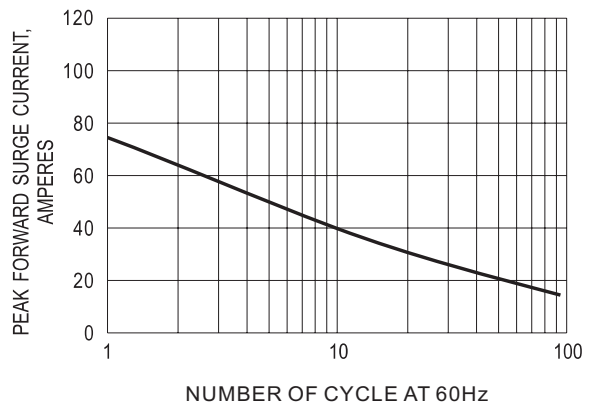


Fig. 4- MAXIMUM NON-REPETITIVE SURGE CURRENT

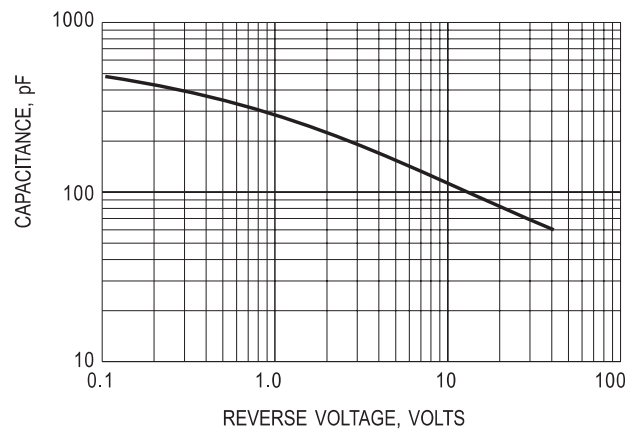


Fig. 5- TYPICAL JUNCTION CAPACITANCE