



DATA SHEET

SB1620CT~SB16100CT

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 100 Volts **CURRENT** 16 Amperes

TO-220AB

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.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

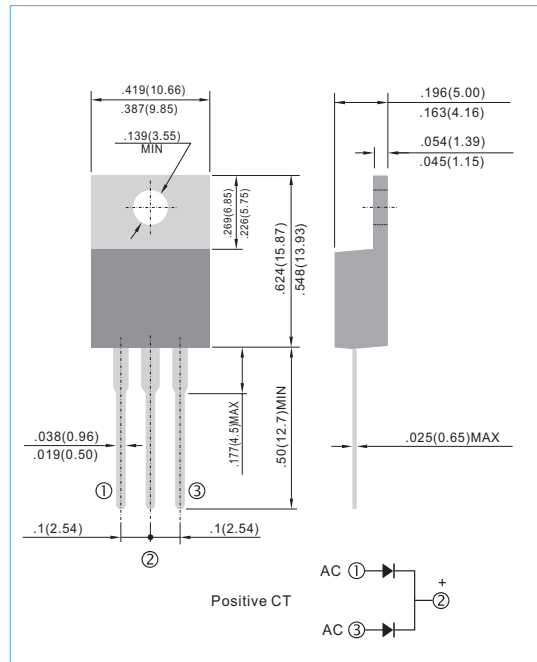
Case: TO-220AB molded plastic package

Terminals: Lead solderable per MIL-STD-202G, Method 208

Polarity: As marked.

Mounting Position: Any

Weight: 0.08 ounces, 2240mg



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| PARAMETER | SYMBOL | SB1620CT | SB1630CT | SB1640CT | SB1645CT | SB1650CT | SB1660CT | SB1680CT | SB16100CT | UNITS |
|--|-----------------|-------------|----------|----------|----------|------------|----------|----------|-----------|-------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 45 | 50 | 60 | 80 | 100 | v |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 31.5 | 35 | 42 | 56 | 70 | v |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 45 | 50 | 60 | 80 | 100 | v |
| Maximum Average Forward Current .375" (9.5mm) lead length at $T_c = 90$ | I_{AV} | 16 | | | | | | | | A |
| Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method) | I_{FSM} | 150 | | | | | | | | A |
| Maximum Forward Voltage at 8.0A, per leg | V_F | 0.55 | | | | 0.75 | | 0.85 | | v |
| Maximum DC Reverse Current $T_A=25$ at Rated DC Blocking Voltage $T_A=100$ | I_R | | | | | 0.5 100 | | | | mA |
| Typical Thermal Resistance | $R_{\theta JC}$ | 2 | | | | | | | | / W |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | -50 TO +125 | | | | | | | | |

NOTES:

Both Bonding and Chip structure are available.



RATING AND CHARACTERISTIC CURVES

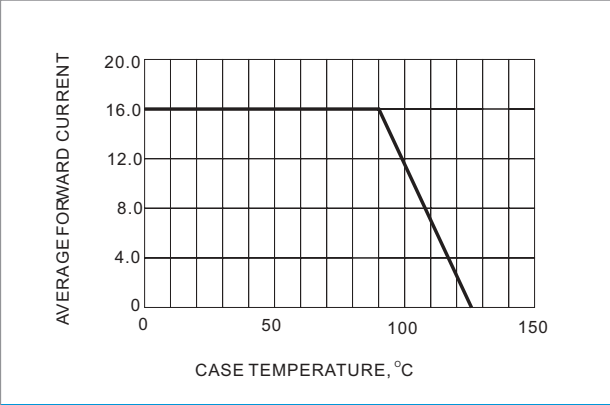


Fig. 1- FORWARD CURRENT DERATING CURVE

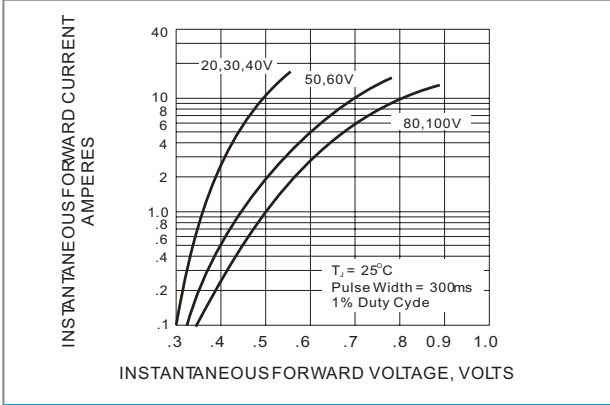


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

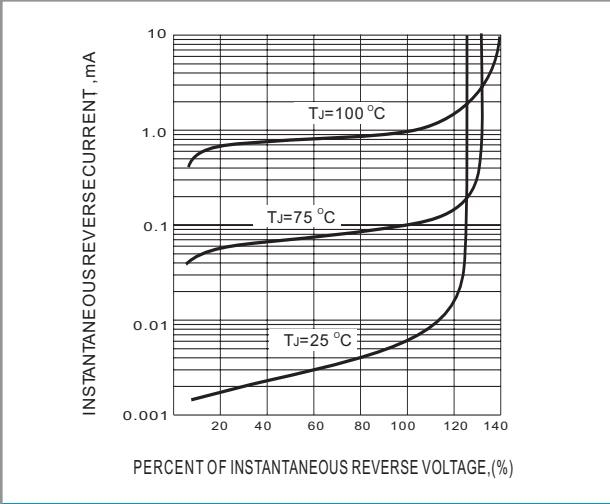


Fig. 3- TYPICAL REVERSE CHARACTERISTIC

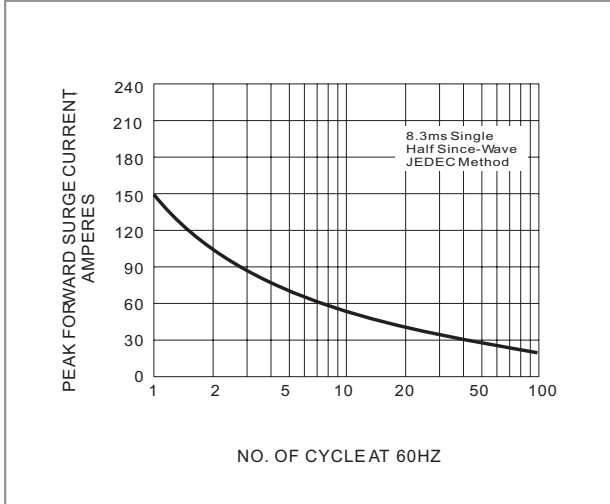


Fig. 4- MAXIMUM NON - REPETITIVE SURGE CURRENT