# SHANGHAI SUNRISE ELECTRONICS CO., LTD.

## SB1620C THRU SB1660C
### SCHOTTKY BARRIER RECTIFIER

*TECHNICAL SPECIFICATION*

### VOLTAGE: 20 TO 60V   CURRENT: 16A

## FEATURES
- Epitaxial construction for chip
- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed:
  250$^o$C/10sec/0.375"(9.5mm) lead length
  at 5 lbs tension

## MECHANICAL DATA
- Terminal: Plated leads solderable per
  MIL-STD 202E, method 208C
- Case: Molded with UL-94 Class V-O
  recognized flame retardant epoxy
- Polarity: Common cathode,Suffix"A"Common anode
- Mounting position: Any

### TO-220



**Dimensions in inches and (millimeters)**
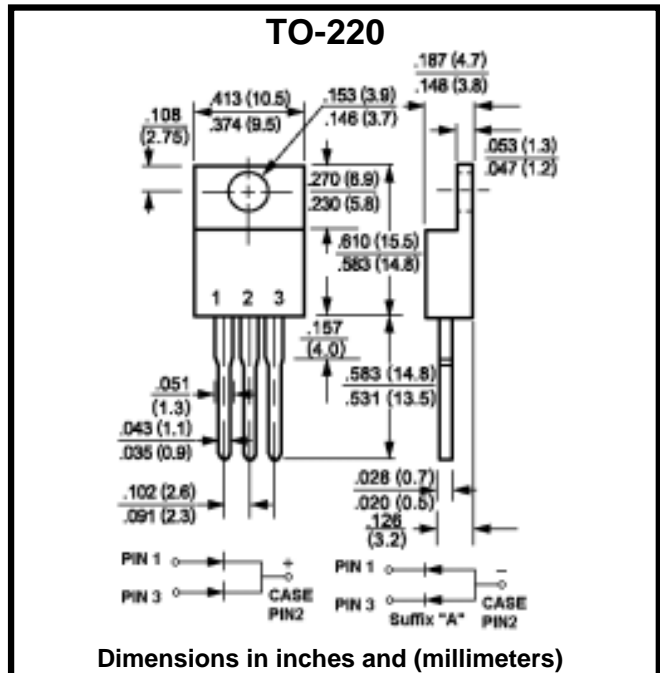
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25$^o$C, unless otherwise stated, for capacitive load, derate current by 20%)

| RATINGS | SYMBOL | SB 1620C | SB 1630C | SB 1635C | SB 1640C | SB 1650C | SB 1660C | UNITS |
|---|---|---|---|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 20 | 30 | 35 | 40 | 50 | 60 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 14 | 21 | 25 | 28 | 35 | 42 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 20 | 30 | 35 | 40 | 50 | 60 | V |
| Maximum Average Forward Rectified Current ($T_C$=95$^o$C) | $I_{F(AV)}$ | 16 | | | | | | A |
| Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load) | $I_{FSM}$ | 150 | | | | | | A |
| Maximum Forward Voltage (at 8.0A DC) | $V_F$ | 0.65 | | | | 0.75 | | V |
| Maximum DC Reverse Current          $T_a$=25$^o$C (at rated DC blocking voltage)          $T_a$=100$^o$C | $I_R$ | 5.0 | | | | | | mA |
|  |  | 50.0 | | | | | | mA |
| Typical Junction Capacitance          (Note 1) | $C_J$ | 700 | | | 500 | | | pF |
| Typical Thermal Resistance          (Note 2) | $R_\theta$(ja) | 3 | | | | | | $^o$C/W |
| Operating Junction Temperature | $T_J$ | -65 to +125 | | | -65 to +150 | | | $^o$C |
| Storage Temperature | $T_{STG}$ | -65 to +150 | | | | | | $^o$C |

Note:
    1.Measured at 1.0 MHz and applied  reverse voltage of 4.0$V_{dc}$
    2.Thermal resistance from junction to case
    3. Suffix "A" common anode

*http://www.sse-diode.com*