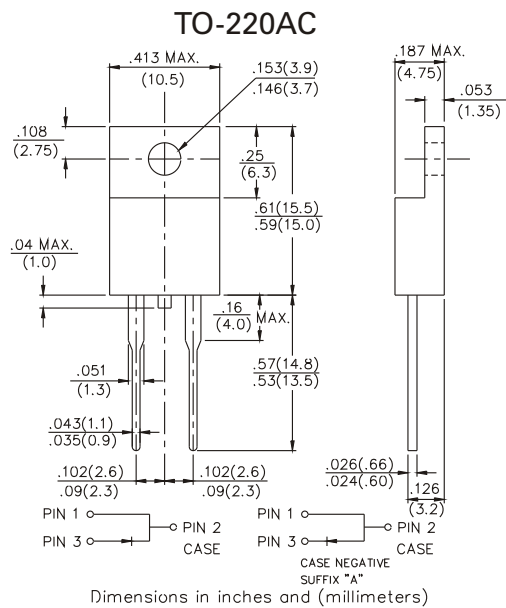
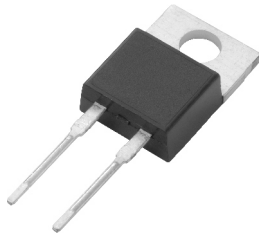


SB820 thru SB8100

SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 100 VOLTS CURRENT - 8.0 AMPERES



FEATURES

- Plastic package has Underwriters laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MILS-19500 / 228
- Low power loss, high efficiency
- Low forward voltage . high current capability
- High surge capability
- For use in low voltage, high frequency inverters Free wheeling. And polarity protection applications
- High temperature soldering : 260°C/10seconds at terminals
- Pb free product are available : 99% Sn above can meet RoHS
- environment substance directive request

MECHANICAL DATA

Case : TO220AC full molded plastic package
 Terminals : Lead solderable per MIL-STD-202, Method 208
 Polarity : As marked.
 Mounting Position : Any
 Weight : 0.08 ounce, 2.24gram

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%

| | SYMBOL | SB820 | SB830 | SB840 | SB850 | SB860 | SB880 | SB8100 | UNITS |
|--|--------------------|-------------|-------|-------|-------|-------|-------|--------|----------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | Volts |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | Volts |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | Volts |
| Maximum Average Forward Current .375" (9.5mm) lead length at $T_c=100^\circ C$ | $I_{(AV)}$ | 8.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) | I_{FSM} | 150 | | | | | | | Amps |
| Maximum Forward Voltage at 8.0A | V_F | 0.55 | | 0.75 | | 0.85 | | | Volts |
| Maximum DC Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$ | I_R | 0.5 50 | | | | | | | mA |
| Typical Thermal Resistance | $R_{\theta JC}$ | 6 | | | | | | | $^\circ C / W$ |
| Operating and Storage Temperature Range | T_J | -50 to +150 | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_J T_{STG} | -50 to +150 | | | | | | | $^\circ C$ |

SB820 thru SB8100

SCHOTTKY BARRIER RECTIFIER

RATINGS AND CHARACTERISTIC CURVES SB820 THRU SB8100

Fig. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

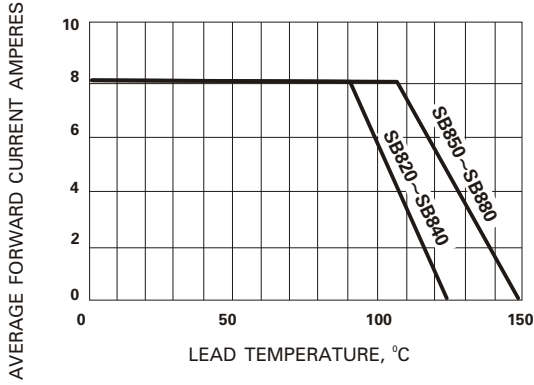


Fig. 2 - TYPICAL REVERSE CHARACTERISTICS

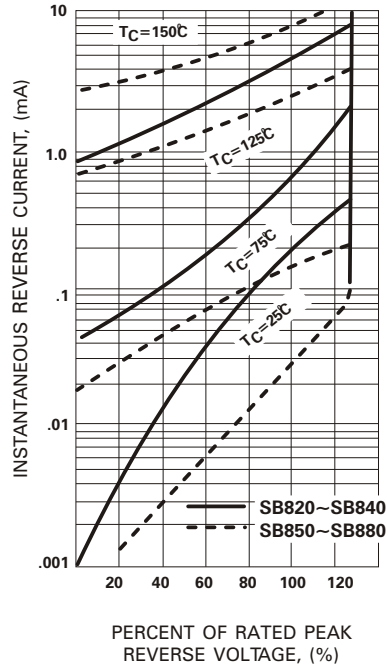


Fig. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

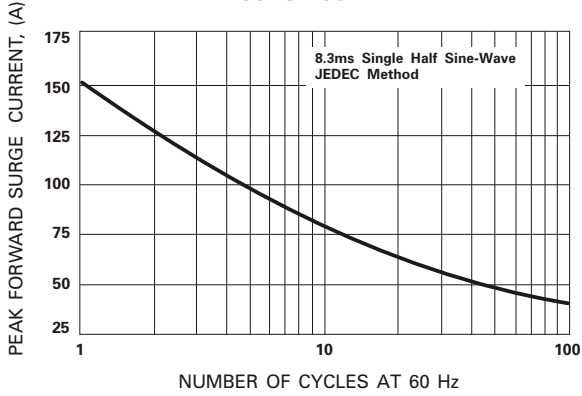


Fig. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

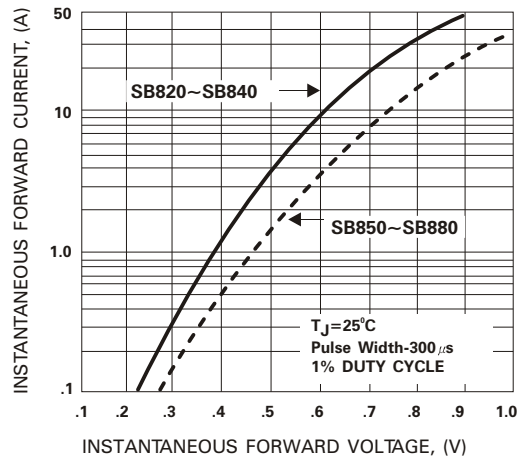


Fig. 5 - TYPICAL JUNCTION CAPACITANCE

