# SB2100A

## SCHOTTKY BARRIER RECTIFIER

**VOLTAGE: 100V** **CURRENT: 2.0A**

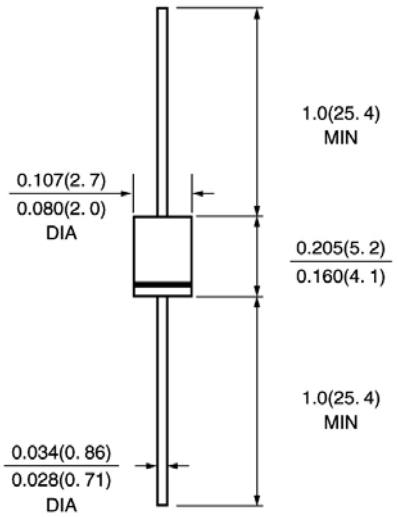
## FEATURE

High current capability, Low forward voltage drop
Low power loss, high efficiency
High surge capability
High temperature soldering guaranteed
250°C /10sec/0.375" lead length at 5 lbs tension

## MECHANICAL DATA

Terminal: Plated axial leads solderable per
MIL-STD 750, method 2026
Case: Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

**DO-41\DO-204AL**




Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

| | SYMBOL | SB2100A | units |
|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 100 | V |
| Maximum RMS Voltage | Vrms | 70 | V |
| Maximum DC blocking Voltage | Vdc | 100 | V |
| Maximum Average Forward Rectified Current 0.375" lead length TL=75°C | If(av) | 2.0 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm | 60.0 | A |
| Maximum Forward Voltage at 2.0A DC (Note 1) | Vf | 0.79 | V |
| Maximum DC Reverse Current Ta =25°C<br>at rated DC blocking voltage Ta =100°C | Ir | 0.5<br>20.0 | mA |
| Typical Thermal Resistance (Note 2) | Rth(ja) | 60.0 | °C /W |
| Storage Temperature | Tstg | -55 to +150 | °C |
| Operating Junction Temperature | Tj | +150 | °C |

Note:
1. Pulse test :300uS pulse width ,1% duty cycle.
2. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted

## RATINGS AND CHARACTERISTIC CURVES SB2100A

**Fig. 1 – Forward Current Derating Curve**

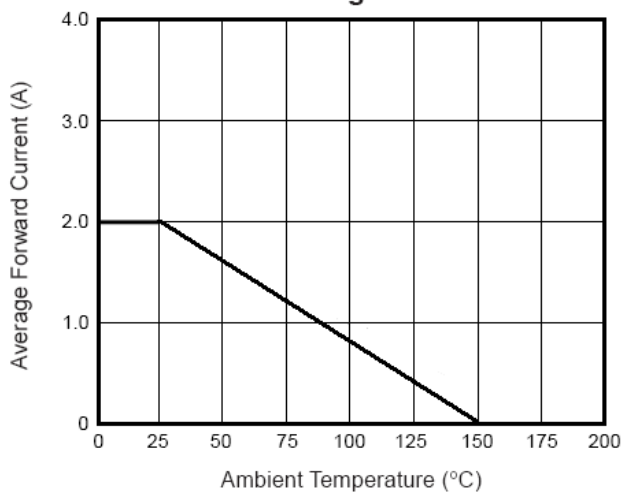



Fig. 2 - Typical Instantaneous Forward Characteristics

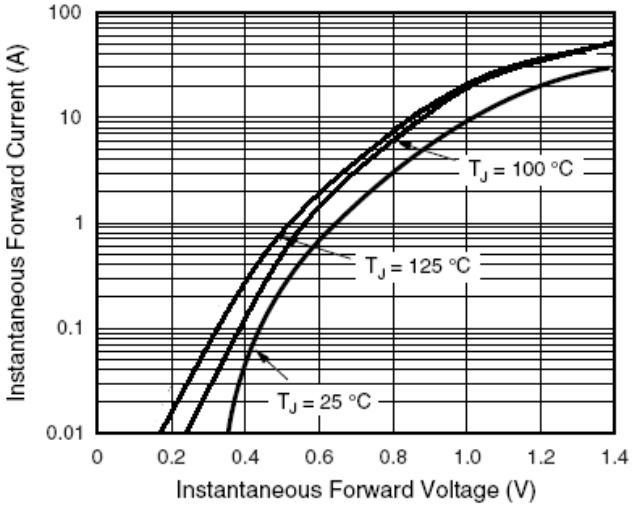



Fig. 3 - Typical Reverse Characteristics

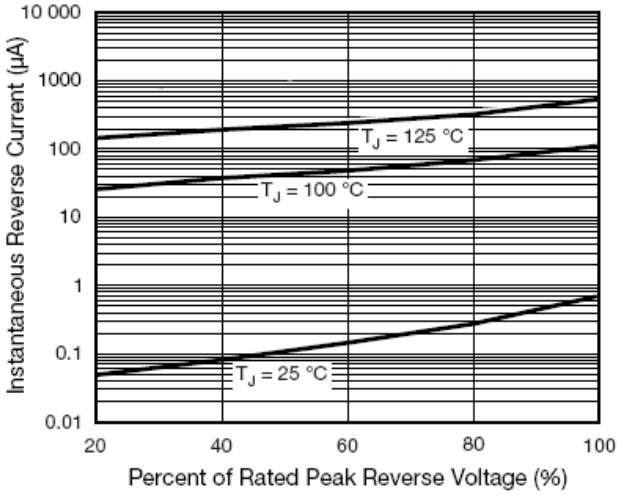



**Fig. 4 – Typical Junction Capacitance**

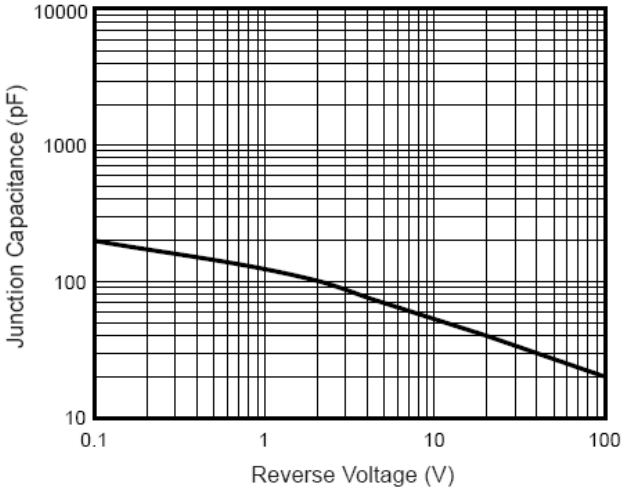



**Fig. 5 - Typical Transient Thermal Impedance**