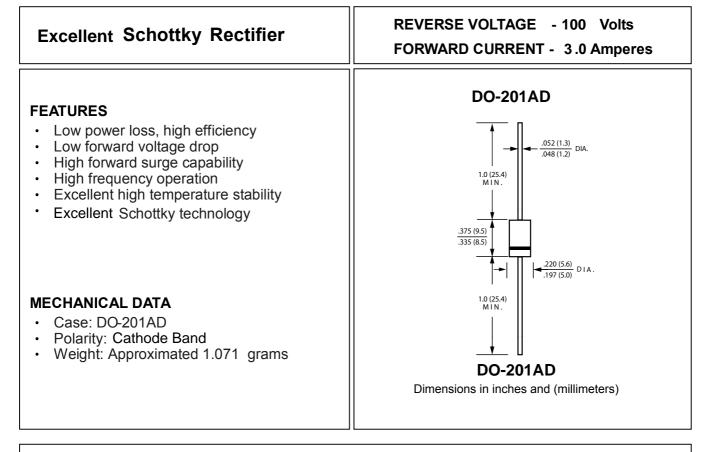


# SB3100L



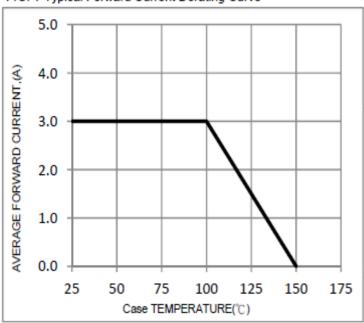
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25  $^\circ\!\!\!\mathbb{C}$  ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load. derate current by 20%

| Characteristics  | Symbol           | Value             |      | Unit     |
|--|------------------|-------------------|------|----------|
| Maximum Repetitive Peak Reverse Voltage  | $V_{RRM}$        | 100               |      | V        |
| RMS Reverse Voltage  | V <sub>RMS</sub> | 70                |      | V        |
| Forward Voltage Drop   |                  | Тур.              | Max. |          |
| I <sub>F</sub> =3 A (T <sub>J</sub> =25℃)  | $V_{F}$          | -                 | 0.6  | V        |
| Maximum Reverse Current at Rated V <sub>RRM</sub><br>T <sub>J</sub> =25°C<br>T <sub>J</sub> =125°C       | I <sub>R</sub>   | Max.<br>200<br>50 |      | μA<br>mA |
| Maximum Average Forward Rectified Current<br>Total device  | I <sub>F</sub>   | 3                 |      | A        |
| Peak Forward Surge Current,<br>8.3 ms Single Half Sine-wave<br>Superimposed on Rated Load (JEDEC method) | I <sub>FSM</sub> | 80                |      | A        |
| Peak Repetitive Reverse Current at tp=2 µs, 1 kHz,   | I <sub>RRM</sub> | 1.0               |      | А        |
| Operating and StorageTemperature Range   | $T_{J,} T_{STG}$ | -55 to +150       |      | °C       |

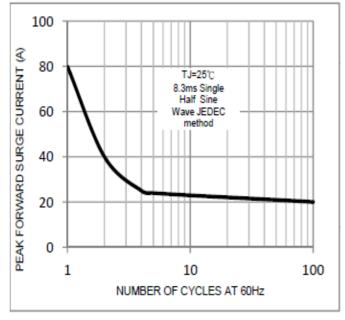


### **Rating and Characteristic Curves**



#### FIG. 1-Typical Forward Current Derating Curve





### 100.00 INSTANTANEOUS FORWARD CURRENT 10.00 1.00 € 0.10 25°C •• 100°C 0.01 0.3 0.4 0.5 0.6 0.7 0.8 FORWARD VOLTAGE (V)

FIG. 2-Typical Forward Characteristics

