SIRECT ELECTRONIC

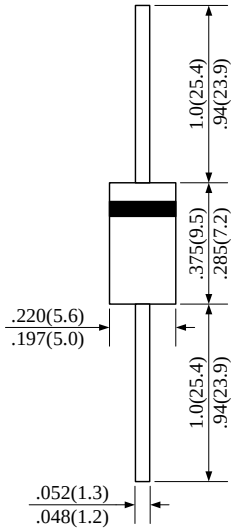
# SB340L~SB3100L

## Power Schottky Rectifier - 3Amp 40~100Volt

### ☐ Features

-Low forward voltage drop
-High current capability
-High reliability
-High surge current capability
-Epitaxial construction

**DO-27 / DO-201AD**




### ☐ Mechanical data

-Case : Molded plastic
-Epoxy : UL 94V-0 rate flame retardant
-Lead : Axial leads, solderable per MIL-STD-202,method 208 guaranteed
-Polarity : Color band denotes cathode end
-Mounting position : Any
-Weight : 1.10 grams

### ☐ Maximum ratings and Electrical characteristics

| TYPE | | SB340L | SB360L | SB3100L | UNIT |
|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | | 40 | 60 | 100 | V |
| Maximum RMS Voltage | | 28 | 42 | 70 | V |
| Maximum DC Blocking Voltage | | 40 | 60 | 100 | V |
| Maximum Average Forward Rectified Current | | 3.0 | | | A |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load | | 80 | | | A |
| Maximum Instantaneous Forward Voltage at 3.0A | | 0.50 | 0.60 | 0.78 | V |
| Repetitive peak avalanche power, tp = 1μs Tj = 25 °C | | 1300 | 2000 | | W |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | Ta = 25°C | 0.5 | 0.3 | 0.05 | mA |
| | Ta = 100°C | 20 | 15 | 10 | |
| Typical Junction Capacitance | | 250 | | | pF |
| Typical Thermal Resistance $R_{\theta JA}$ | | 20 | | | °C/W |
| Operating Temperature Range $T_J$ | | -50 to +150 | | -50 to +175 | °C |
| Storage Temperature Range $T_{STG}$ | | -50 to +150 | | | |

Note: Pulse Test : 380μs pulse width, 2% duty cycle

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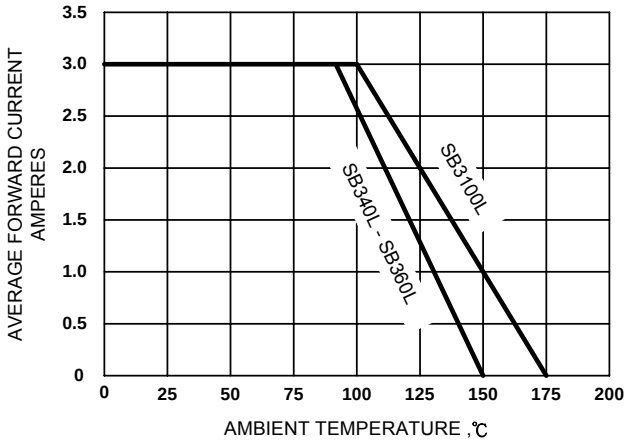


**Figure 1. Forward Current Derating Curve**

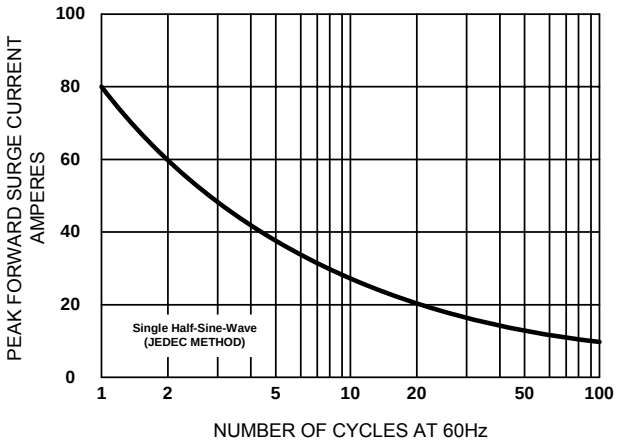


**Figure 2. Maximum Non-repetitive Surge Current**

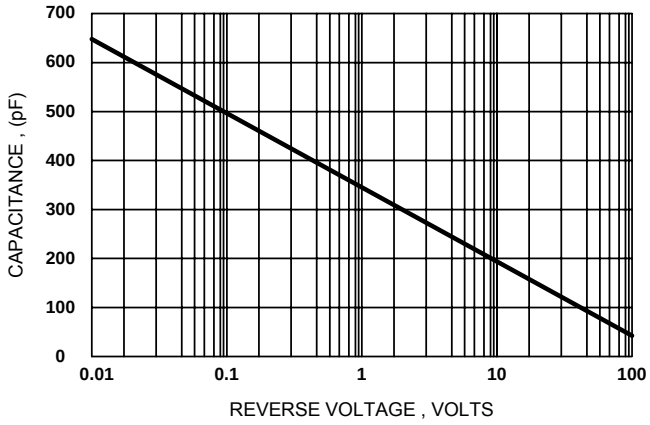


**Figure 3. Typical Junction Capacitance**

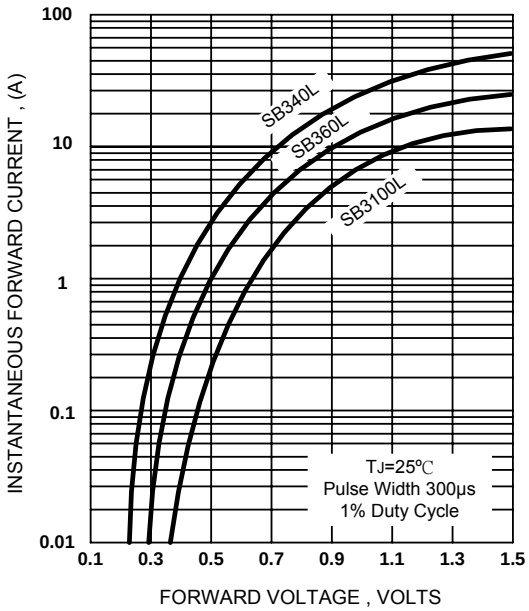


**Figure 4. Typical Forward Characteristics**

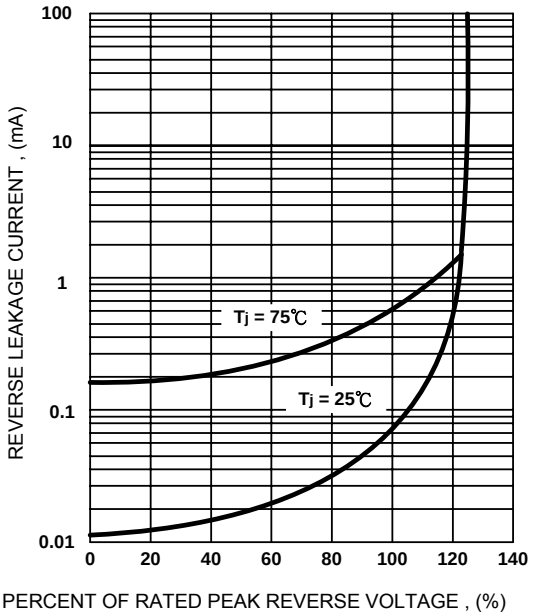


**Figure 5. Typical Reverse Characteristics**