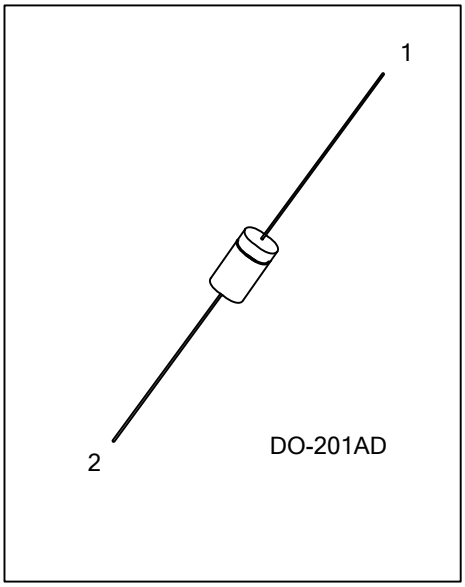
**SB3100** **Preliminary** ***DIODE***

# 3.0A SCHOTTKY BARRIER RECTIFIER




## ■ DESCRIPTION

The UTC **SB3100** is a 3.0A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with high surge capability, high efficiency, high current capability and low forward voltage drop, etc.

The UTC **SB3100** is suitable for free wheeling and polarity protection, etc.

## ■ FEATURES

* High surge capability
* High efficiency
* High current capability
* Low power loss
* Low forward voltage drop

## ■ ORDERING INFORMATION

| Ordering Number | | Package | Pin Assignment | | Packing |
|---|---|---|---|---|---|
| Lead Free | Halogen Free | | 1 | 2 | |
| SB3100L-Z21D-R | SB3100G-Z21D-R | DO-201AD | K | A | Tape Reel |

Note: Pin Assignment: A: Anode, K: Cathode

| | |
|---|---|
| SB3100L-Z21D-R<br>(1)Packing Type<br>(2)Package Type<br>(3)Lead Free | (1) R: Tape Reel<br>(2) Z21D: DO-201AD<br>(3) L: Lead Free, G: Halogen Free |

## ■ ABSOLUTE MAXIMUM RATINGS ($T_A$=25°C, unless otherwise specified)

| PARAMETER | | SYMBOL | RATINGS | UNIT |
|---|---|---|---|---|
| Peak Repetitive Reverse Voltage | | $V_{RRM}$ | 100 | V |
| Working Peak Reverse Voltage | | $V_{RWM}$ | 100 | V |
| DC Blocking Voltage | | $V_R$ | 100 | V |
| RMS Reverse Voltage | | $V_{R(RMS)}$ | 70 | V |
| Average Rectified Output Current (Note 2) | $T_C$=80°C | $I_O$ | 3.0 | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | | $I_{FSM}$ | 80 | A |
| Forward Voltage | $I_F$=30A | $V_{FM}$ | 0.79 | V |
| Peak Reverse Current at Rated DC Blocking Voltage | $T_C$=25°C | $I_{RM}$ | 0.5 | mA |
| | $T_C$=100°C | | 20 | mA |
| Typical Junction Capacitance (Note 3) | | $C_j$ | 250 | pF |
| Typical Thermal Resistance Junction to Ambient | | $R_{\theta JA}$ | 20 | K/W |
| Junction Temperature Range | | $T_J$ | -65~+150 | °C |
| Storage Temperature Range | | $T_{STG}$ | -65~+150 | °C |

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.
2. Measured at ambient temperature at a distance of 9.5mm from the case.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.