



SB3100

Preliminary

DIODE

3.0A SCHOTTKY BARRIER RECTIFIER

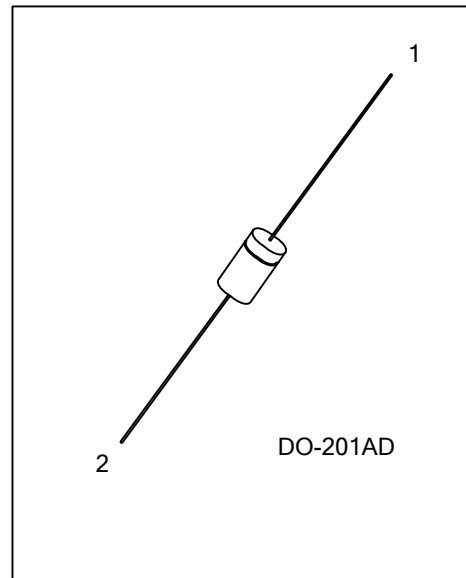
DESCRIPTION

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

<p>SB3100L-Z21D-R</p> <p>(1)Packing Type (2)Package Type (3)Lead Free</p>	<p>(1) R: Tape Reel (2) Z21D: DO-201AD (3) L: Lead Free, G: Halogen Free</p>
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■ **ABSOLUTE MAXIMUM RATINGS** ($T_A=25^\circ\text{C}$, 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)	$T_C=80^\circ\text{C}$	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	$I_F=30\text{A}$	V_{FM}	0.79	V
Peak Reverse Current at Rated DC	$T_C=25^\circ\text{C}$	I_{RM}	0.5	mA
Blocking Voltage	$T_C=100^\circ\text{C}$		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	$^\circ\text{C}$
Storage Temperature Range		T_{STG}	-65~+150	$^\circ\text{C}$

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.

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