



SB3100

DIODE

3.0A SCHOTTKY BARRIER RECTIFIER

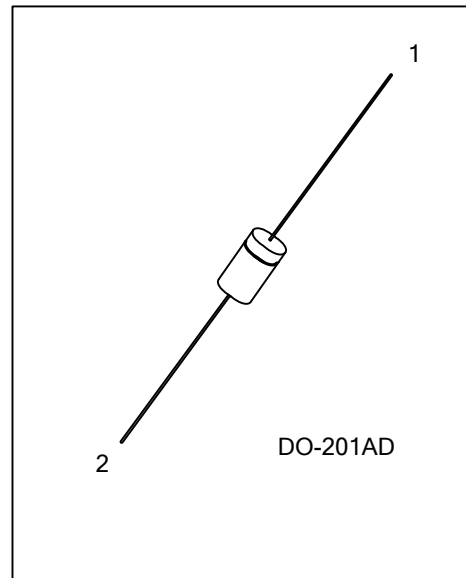
DESCRIPTION

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.

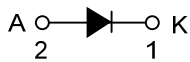
The UTC **SB3100** is suitable for free wheeling and polarity protection, etc.

FEATURES

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



SYMBOL



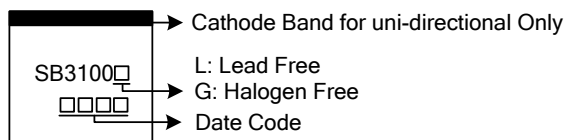
ORDERING INFORMATION

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

Note: Pin Assignment: A: Anode K: Cathode

<p>SB3100L-Z21D-B</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) B: Tape Box (2) Z21D: DO-201AD (3) L: Lead Free, G: Halogen Free and Lead Free
---	--

MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak 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)	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
Junction Temperature Range	T_J	-65~+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65~+150	$^\circ\text{C}$

Note: 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.

■ THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	20	$^\circ\text{C/W}$

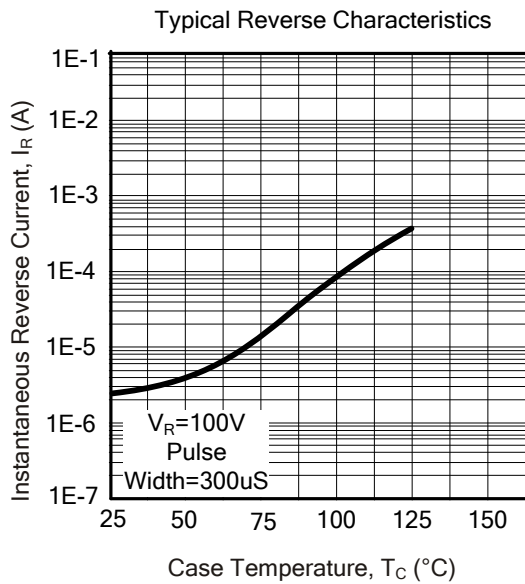
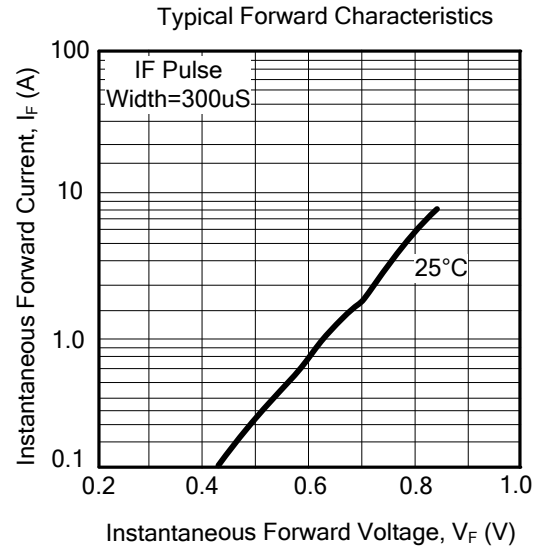
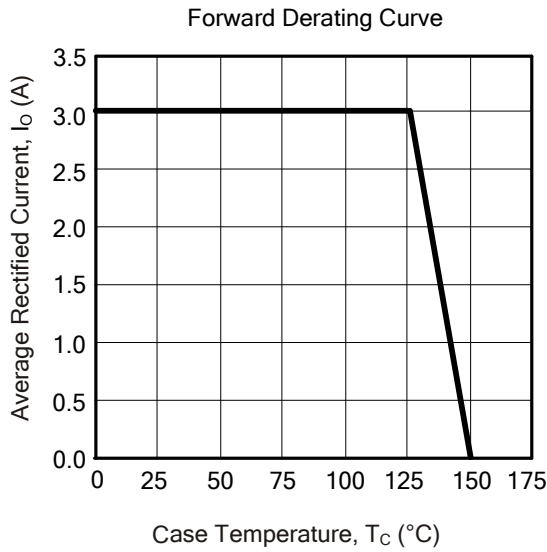
■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	V_F	$I_F=3.0\text{A}$			0.85	V
Peak Reverse Current at Rated DC Blocking Voltage	I_R	$T_C=25^\circ\text{C}$			0.6	mA
		$T_C=100^\circ\text{C}$			20	mA
Typical Junction Capacitance (Note 2)	C_j			250		pF

Notes: 1. Measured at ambient temperature at a distance of 9.5mm from case.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

■ TYPICAL CHARACTERISTICS



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.