



SB3100

Preliminary

DIODE

3.0A SCHOTTKY BARRIER RECTIFIER

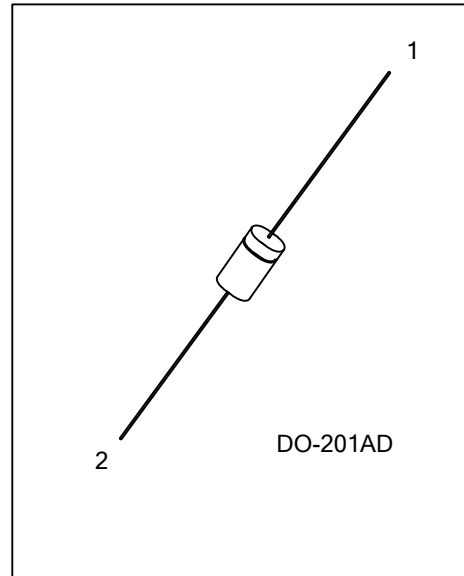
DESCRIPTION

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.

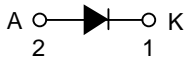
The UTC **SB3100** is suitable for free wheeling and polarity protection, etc.

FEATURES

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



SYMBOL



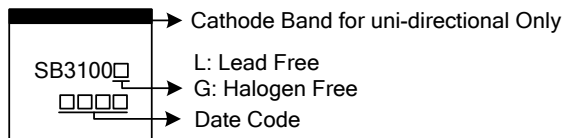
ORDERING INFORMATION

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> <ul style="list-style-type: none"> (1)Packing Type (2)Package Type (3)Green Package 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) Z21D: DO-201AD (3) L: Lead Free, G: Halogen Free and Lead Free
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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)	$T_C=80^\circ\text{C}$	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
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	$I_F=3.0\text{A}$			0.74	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.

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