



SB10100

Preliminary

DIODE

10A SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

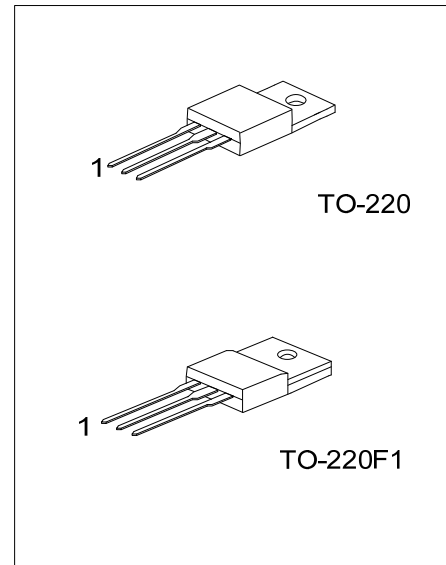
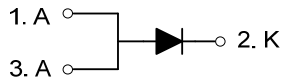
The UTC **SB10100** is a Schottky Rectifier with high current capacity and low forward voltage.

The UTC **SB10100** is suitable for polarity protection ,low voltage and high frequency inverters and free wheeling applications.

FEATURES

- * Guard Ring Transient Protection
- * High surge Current Capability
- * High Current Capability
- * Low Forward Voltage

SYMBOL



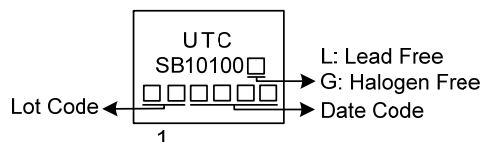
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
SB10100L-TA3-T	SB10100G-TA3-T	TO-220	A	K	A	Tube
SB10100L-TF1-T	SB10100G-TF1-T	TO-220F1	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>SB10100G-TA3-T</p> <p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) T: Tube (2) TA3: TO-220, TF1: TO-220F1 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Working Peak Reverse Voltage	V_{RWM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	V
DC Blocking Voltage	V_R	100	V
Average Rectified Output Current	I_O	10	A
Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	I_{FSM}	150	A
Operating Temperature	T_J	-65 ~ +150	$^\circ\text{C}$
Storage Temperature	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. These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	60	$^\circ\text{C/W}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	$I_R=0.50\text{mA}$	100			V
Forward Voltage Drop	V_{FM}	$I_F=10\text{A}, T_J=25^\circ\text{C}$			0.85	V
		$I_F=10\text{A}, T_J=100^\circ\text{C}$			0.80	V
Leakage Current (Note 1)	I_{RM}	$V_R=100\text{V}, T_J=25^\circ\text{C}$			500	μA
		$V_R=100\text{V}, T_J=100^\circ\text{C}$			50	mA

- Notes: 1. Short duration pulse test used to minimize self-heating effect.
 2. Thermal resistance junction to case mounted on heatsink.

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