



SB130

DIODE

1.0A SCHOTTKY BARRIER RECTIFIER

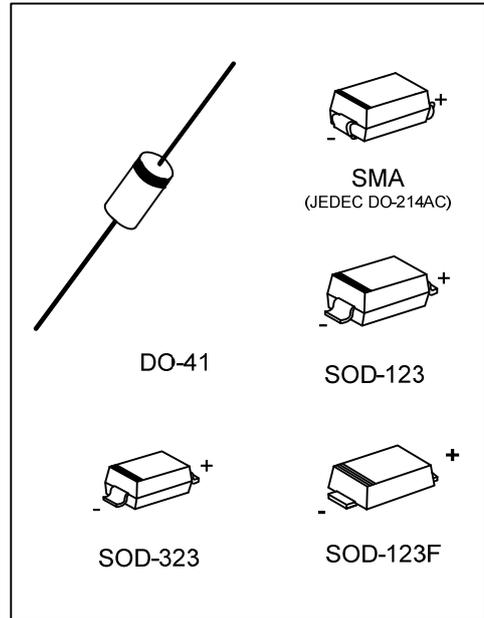
DESCRIPTION

The UTC **SB130** is a 1.0A schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, high current capability and high efficiency, etc.

The UTC **SB130** is suitable for use in free wheeling, high frequency inverters, low voltage and polarity protection applications.

FEATURES

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



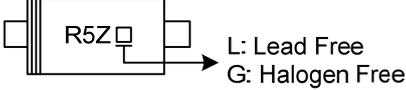
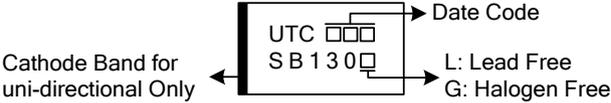
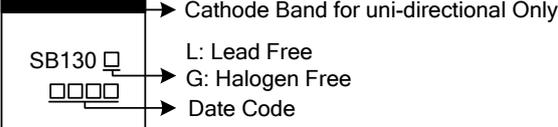
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB130L-CA2-R	SB130G-CA2-R	SOD-123	K	A	Tape Reel
SB130L-CA2F-R	SB130G-CA2F-R	SOD-123F	K	A	Tape Reel
SB130L-CB2-R	SB130G-CB2-R	SOD-323	K	A	Tape Reel
SB130L-SMA-R	SB130G-SMA-R	SMA	K	A	Tape Reel
SB130L-Z41-B	SB130G-Z41-B	DO-41	K	A	Tape Box
SB130L-Z41-R	SB130G-Z41-R	DO-41	K	A	Tape Reel

Note: Pin Assignment: K: Cathode A: Anode

<p>SB130G-CA2-R</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Green Package</p>	<p>(1) B: Tape Box, R: Tape Reel</p> <p>(2) CA2: SOD-123, CA2F: SOD-123F, CB2: SOD-323</p> <p>SMA: SMA, Z41: DO-41</p> <p>(3) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING

PACKAGE	MARKING
SOD-123 SOD-123F SOD-323	 <p>R5Z □ → L: Lead Free G: Halogen Free</p>
SMA	 <p>Cathode Band for uni-directional Only ← UTC □□□ → Date Code SB 130 □ → L: Lead Free G: Halogen Free</p>
DO-41	 <p>→ Cathode Band for uni-directional Only SB130 □ → L: Lead Free G: Halogen Free □□□□ → Date Code</p>

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

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT
Working Peak Reverse Voltage	V_{RWM}	30	V
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
DC Blocking Voltage	V_R	30	V
Average Rectified Output Current	I_O	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	25	A
Operating Junction Temperature	T_J	-65 ~ +125	$^{\circ}\text{C}$
Storage Temperature	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 DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient (Note 2)	SOT-123 SOD-123F SOD-323	200	$^{\circ}\text{C/W}$
	SMA		
	DO-41	50	$^{\circ}\text{C/W}$
		θ_{JA}	

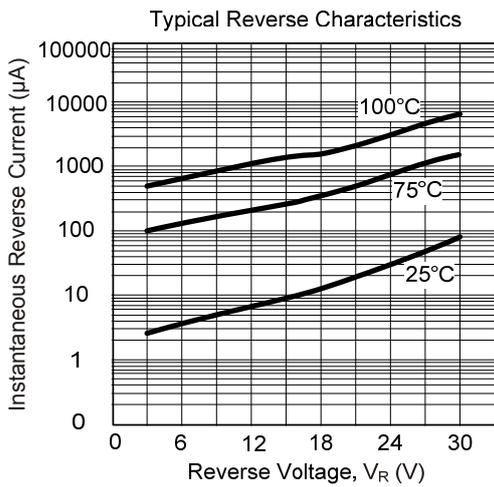
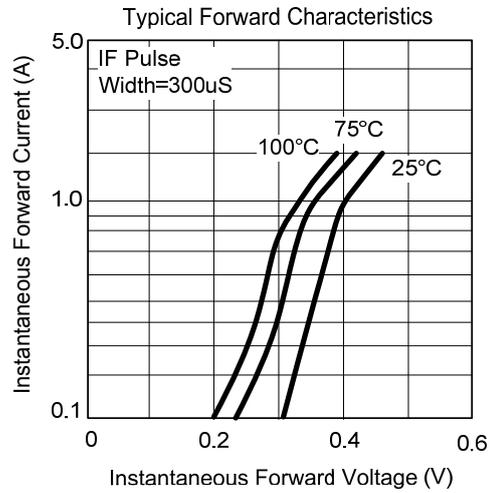
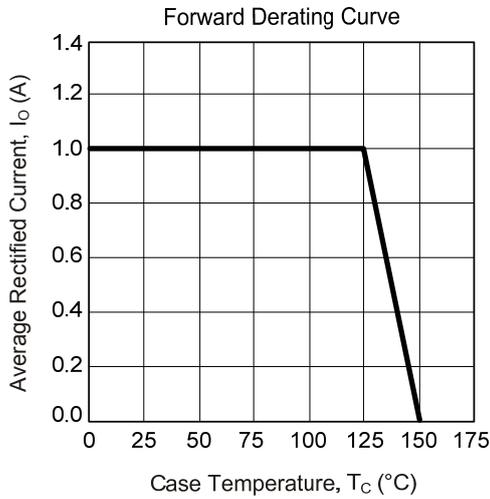
■ ELECTRICAL CHARACTERISTICS (Note 2) ($T_A=25^{\circ}\text{C}$ unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=0.50\text{mA}$	30			V
Forward Voltage Drop	V_{FM}	$I_F=1.0\text{A}$			0.5	V
Peak Reverse Current at Rated DC Blocking Voltage	I_{RM}	$T_A=25^{\circ}\text{C}$			1.0	mA
		$T_A=100^{\circ}\text{C}$			10	mA

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

2. Short duration test pulse used to minimize self-heating effect.

■ TYPICAL CHARACTERISTICS



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