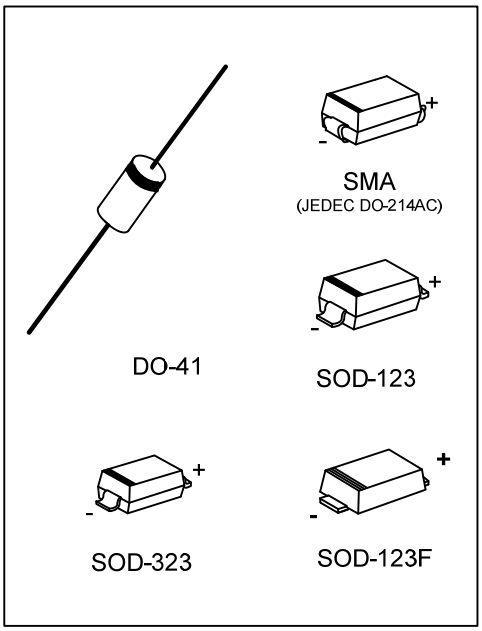
SB130

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

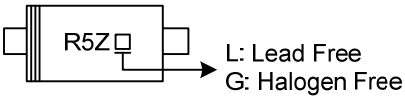
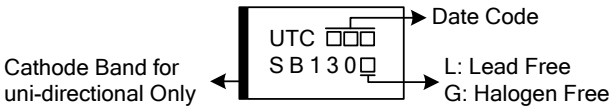
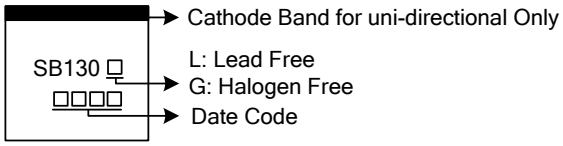
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB130L-CA2-R	SB130G-CA2-R	SOD-123	K	A	Tape Reel
SB130L-CA2F-R	SB130G-CA2F-R	SOD-123F	K	A	Tape Reel
SB130L-CB2-R	SB130G-CB2-R	SOD-323	K	A	Tape Reel
SB130L-SMA-R	SB130G-SMA-R	SMA	K	A	Tape Reel
SB130L-Z41-B	SB130G-Z41-B	DO-41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

Note: Pin Assignment: K: Cathode A: Anode

SB130G-CA2-R
(1)Packing Type
(2)Package Type
(3)Green Package

(1) B: Tape Box, R: Tape Reel
(2) CA2: SOD-123, CA2F: SOD-123F, CB2: SOD-323
SMA: SMA, Z41: DO-41
(3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING

PACKAGE	MARKING
SOD-123 SOD-123F SOD-323	
SMA	
DO-41	

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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	°C
Storage Temperature	T_{STG}	-65 ~ +150	°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	θ_{JA}	200	°C/W
	SMA		95	°C/W
	DO-41		50	°C/W

■ ELECTRICAL CHARACTERISTICS (Note 2) (T_A =25°C unless otherwise specified.)

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