



SB5200

Preliminary

DIODE

SCHOTTKY BARRIER RECTIFIER

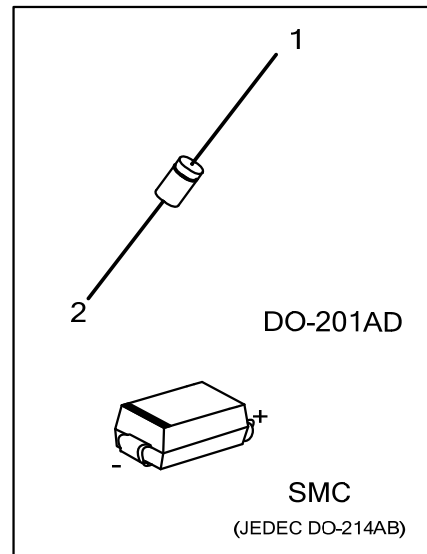
■ DESCRIPTION

The UTC **SB5200** is a schottky barrier rectifier, it uses UTC's advanced technology to provide customers with high current capability and low forward voltage drop, etc.

The UTC **SB5200** is suitable for free wheeling, low voltage, high frequency inverters and polarity protection applications.

■ FEATURES

- * Low forward voltage drop
- * High current capability



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB5200L-SMC-R	SB5200G-SMC-R	SMC	K	A	Tape Reel
SB5200L-Z21D-B	SB5200G-Z21D-B	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>SB5200L-SMC-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, B: Tape Box (2) SMC: SMC, Z21D: DO-201AD (3) L: Lead Free, G: Halogen Free and Lead Free
--	--

■ MARKING

DO-201AD	SMC
<ul style="list-style-type: none"> → Cathode Band for uni-directional Only → L: Lead Free → G: Halogen Free → Date Code 	<ul style="list-style-type: none"> → Date Code ← Cathode Band for uni-directional Only → L: Lead Free → G: Halogen Free

■ ABSOLUTE MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	200	V
RMS Voltage	V_{RMS}	140	V
DC Blocking Voltage	V_{DC}	200	V
Average Forward Rectified Current	I_F	5.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	100.0	A
Junction Temperature	T_J	-55~+150	°C
Storage Temperature	T_{STG}	-55~+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	SMC	70	°C/W
	DO-201AD	50	°C/W

■ ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	V_F	$I_F=5A, T_A=25^\circ C$			0.9	V
		$I_F=5A, T_A=100^\circ C$			0.8	V
DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ C$			0.2	mA
		$T_A=100^\circ C$			5.0	mA
Junction Capacitance	C_J				110	pF

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.