



## SB5200

Preliminary

DIODE

### SCHOTTKY BARRIER RECTIFIER

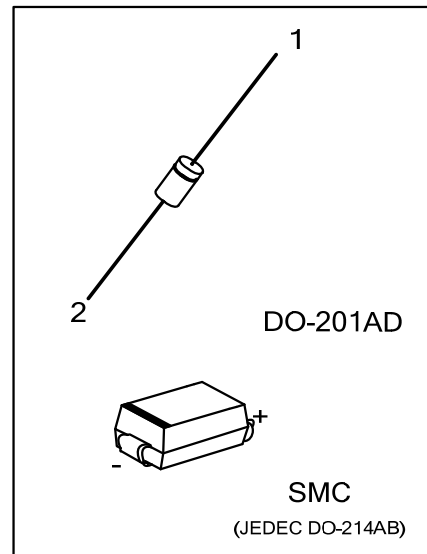
#### DESCRIPTION

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> <p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) R: Tape Reel, B: Tape Box (2) SMC: SMC, Z21D: DO-201AD (3) L: Lead Free, G: Halogen Free and Lead Free</p>
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#### MARKING

DO-201AD	SMC
<p>SB5200□ □□□□</p> <p>→ Cathode Band for uni-directional Only → L: Lead Free → G: Halogen Free → Date Code</p>	<p>UTC □□□□ SB5200□</p> <p>→ Date Code → L: Lead Free → G: Halogen Free</p> <p>← Cathode Band for uni-directional Only</p>

### ■ 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

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