



SB5200

DIODE

SCHOTTKY BARRIER RECTIFIER

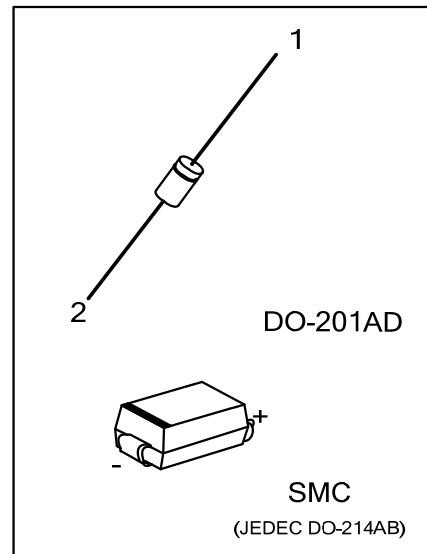
■ **DESCRIPTION**

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>SB5200G-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) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ **MARKING**

DO-201AD	SMC
<p>→ Cathode Band for uni-directional Only</p> <p>SB5200□</p> <p>□□□□</p> <p>→ L: Lead Free → G: Halogen Free → Date Code</p>	<p>→ Date Code</p> <p>UTC □□□□</p> <p>SB5200□</p> <p>→ 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
Typical Thermal Resistance	DO-201AD	θ_{JA}	50	°C/W
	SMC		70	°C/W
	DO-201AD	θ_{JC}	12	°C/W
	SMC	θ_{JL}	20	°C/W

Note: FR-4 PCB, 2 oz Copper. Minimum recommended pad layout.

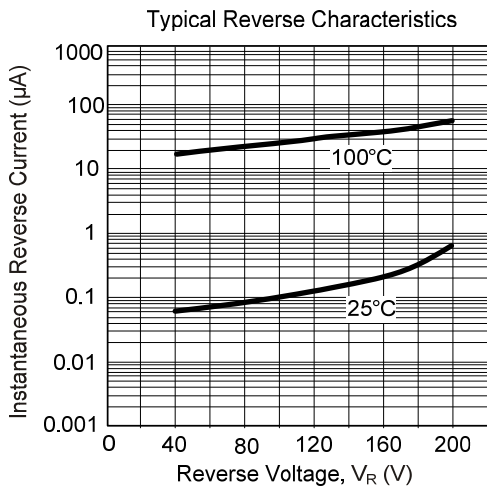
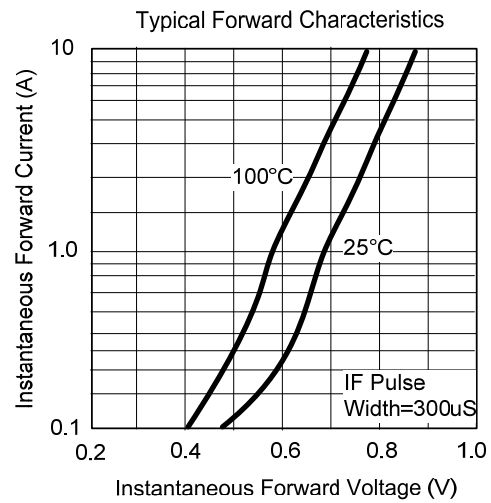
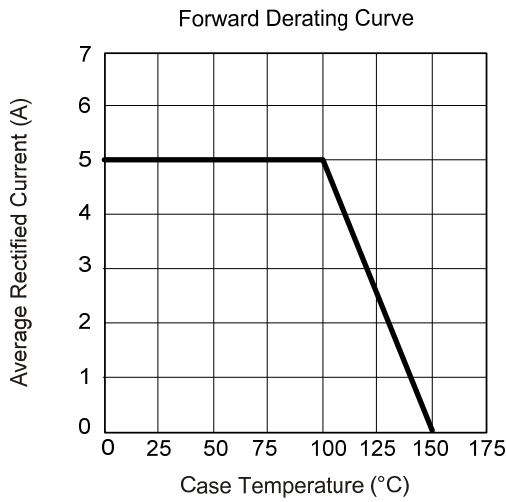
■ ELECTRICAL CHARACTERISTICS

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

■ TYPICAL CHARACTERISTICS



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