



## SB545

Preliminary

DIODE

### 5.0A SCHOTTKY BARRIER RECTIFIER

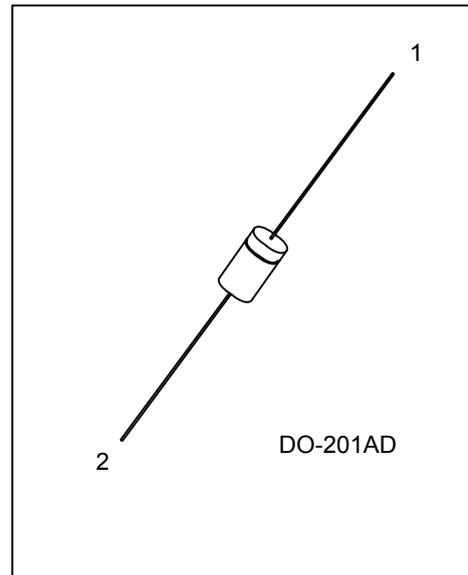
#### DESCRIPTION

The UTC **SB545** is 5.0A schottky barrier rectifier. it uses UTC's advanced technology to provide customers with high current capability and low forward voltage drop, etc.

The UTC **SB545** is suitable for free wheeling, low voltage and polarity protection applications, etc.

#### FEATURES

- \* Metal to silicon rectifier, majority carrier conduction.
- \* For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- \* Low power loss, high efficiency.
- \* High current capability, low  $V_F$ .
- \* High surge capacity.



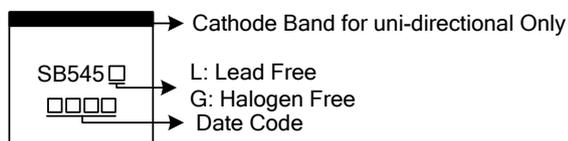
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB545L-Z21D-B	SB545G-Z21D-B	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>SB545L-Z21D-B</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) B: Tape Box (2) Z21D: DO-201AD (3) L: Lead Free, G: Halogen Free and Lead Free</p>
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#### MARKING



■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	$V_R$	45	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	45	V
Working Peak Reverse Voltage	$V_{RWM}$	45	V
Average Rectified Output Current	$I_O$	5.0	A
Non-Repetitive Peak Forward Surge Current: 8.3ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	150	A
Operating Junction Temperature	$T_J$	-65 ~ +150	°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 RESISTANCES CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	$\theta_{JA}$	40	°C/W

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop	$V_F$	$I_F=5.0A, T_J=25^\circ C$			0.60	V
		$I_F=5.0A, T_J=100^\circ C$			0.55	V
Peak Reverse Current at Rated DC Blocking Voltage	$I_R$	$V_R=45V, T_J=25^\circ C$			500	$\mu A$
		$V_R=45V, T_J=100^\circ C$			50	mA

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