



## SB345

Preliminary

DIODE

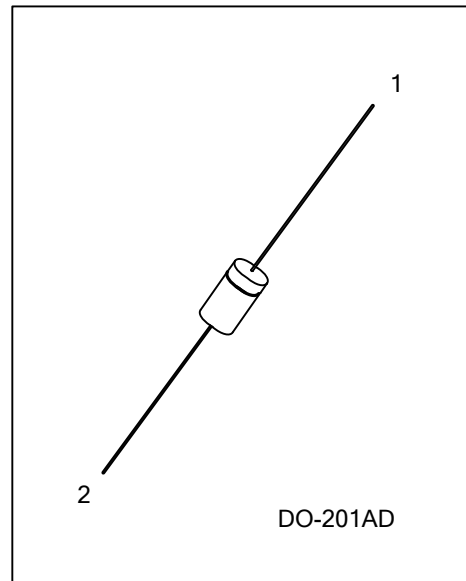
### SCHOTTKY BARRIER RECTIFIER

#### DESCRIPTION

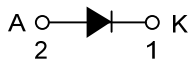
The UTC **SB345** is a schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, high current capability and high efficiency, etc.

#### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High surge capability
- \* Low power loss
- \* High efficiency



#### SYMBOL



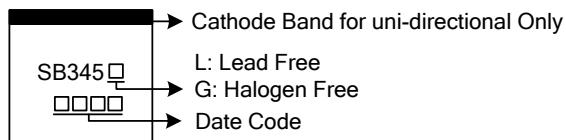
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB345L-Z21D-B	SB345G-Z21D-B	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>SB345L-Z21D-B</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p>	<p>(1) B: Tape Box</p> <p>(2) Z21D: DO-201AD</p> <p>(3) L: Lead Free, G: Halogen Free and Lead Free</p>
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#### MARKING



### ■ ABSOLUTE MAXIMUM RATINGS

Single phase, half wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated.

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	$V_{DC}$	45	V
Recurrent Peak Reverse Voltage	$V_{RRM}$	45	V
RMS Voltage	$V_{RMS}$	31.5	V
Average Forward Rectified Current 3/8" Lead Length	$I_o$	3.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	100	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 DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient (Note 2)	$\theta_{JA}$	50	°C/W

### ■ ELECTRICAL CHARACTERISTICS

Single phase, half wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop	$V_F$	$I_F=3.0A$			0.50	V
DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A=25^\circ C$			0.5	mA
		$T_A=100^\circ C$			10.0	mA
Junction Capacitance (Note 1)	$C_J$			220.0		pF

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted.

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