



**SB560**

Preliminary

**DIODE**

**5.0A SCHOTTKY BARRIER RECTIFIER**

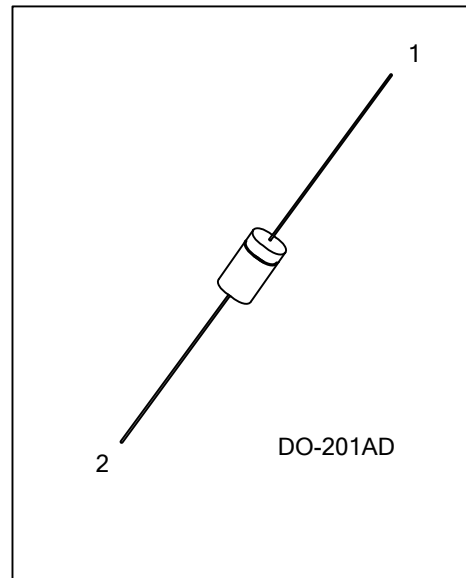
■ DESCRIPTION

The UTC **SB560** 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 **SB560** is suitable for free wheeling, low voltage and polarity protection applications, etc.

■ FEATURES

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



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB560L-Z21D-R	SB560G-Z21D-R	DO-201AD	K	A	Tape Reel

Note: Pin Assignment: A: Anode, K: Cathode

<p>SB560L-Z21D-R</p> <p>(1)Packing Type (2)Package Type (3)Lead Free</p>	<p>(1) R: Tape Reel (2) Z21D: DO-201AD (3) L: Lead Free, G: Halogen Free</p>
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■ MARKING INFORMATION

PACKAGE	MARKING
DO-201AD	<p>UTC SB560</p> <p>L: Lead Free G: Halogen Free Date Code</p>

■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$  unless otherwise specified.)(Note 2)

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	$V_R$	60	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	60	V
Working Peak Reverse Voltage	$V_{RWM}$	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	V
Average Rectified Output Current	$I_O$	5.0	A
Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	$I_{FSM}$	150	A
Power Dissipation	$P_D$	3.7	W
Junction Temperature	$T_J$	-65 ~ +150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-65 ~ +150	$^\circ\text{C}$

Notes: 1. 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.

2. These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	$\theta_{JA}$	40	$^\circ\text{C/W}$

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$  unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	$I_R=0.50\text{mA}$	60			V
Forward Voltage Drop	$V_{FM}$	$I_F=5.0\text{A}, T_J=25^\circ\text{C}$			0.67	V
		$I_F=5.0\text{A}, T_J=100^\circ\text{C}$			0.62	V
Leakage Current (Note 1)	$I_{RM}$	$V_R=60\text{V}, T_J=25^\circ\text{C}$			0.5	mA
		$V_R=60\text{V}, T_J=100^\circ\text{C}$			25	mA

Notes: 1. Short duration pulse test used to minimize self-heating effect.

2. Thermal resistance junction to case mounted on heatsink.

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