



SB260

DIODE

2.0A SCHOTTKY BARRIER RECTIFIER

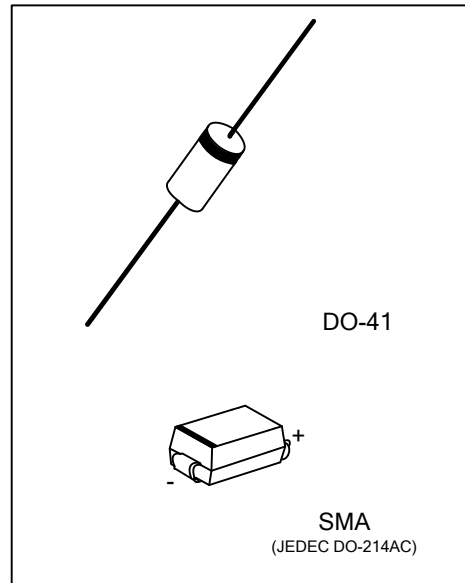
DESCRIPTION

The UTC **SB260** is a 2.0A schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, high current capability and high efficiency, etc.

The UTC **SB260** is suitable for use in free wheeling, high frequency inverters, low voltage and polarity protection applications.

FEATURES

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



ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB260L-SMA-R	SB260G-SMA-R	SMA	K	A	Tape Reel
SB260L-Z41-B	SB260G-Z41-B	DO-41	K	A	Tape Box
SB260L-Z41-R	SB260G-Z41-R	DO-41	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>SB260L-SMA-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) B: Tape Box, R: Tape Reel (2) SMA: SMA, Z41: DO-41 (3) L: Lead Free, G: Halogen Free and Lead Free</p>
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MARKING

SMA	DO-41
<p>Cathode Band for uni-directional Only</p> <p>UTC □□□</p> <p>SB260□</p> <p>Date Code</p> <p>L: Lead Free G: Halogen Free</p>	<p>Cathode Band for uni-directional Only</p> <p>SB260□</p> <p>□□□□</p> <p>Date Code</p> <p>L: Lead Free G: Halogen Free</p>

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

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_R	60	V
Working Peak Reverse Voltage	V_{RWM}	60	V
Repetitive Peak Reverse Voltage	V_{RRM}	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	V
Average Rectified Output Current ($T_A=25^\circ\text{C}$) (Note 1)	I_O	2.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50	A
Operating Junction Temperature	T_J	-55~+125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~+125	$^\circ\text{C}$

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	θ_{JA}	50	$^\circ\text{C/W}$

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

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%.

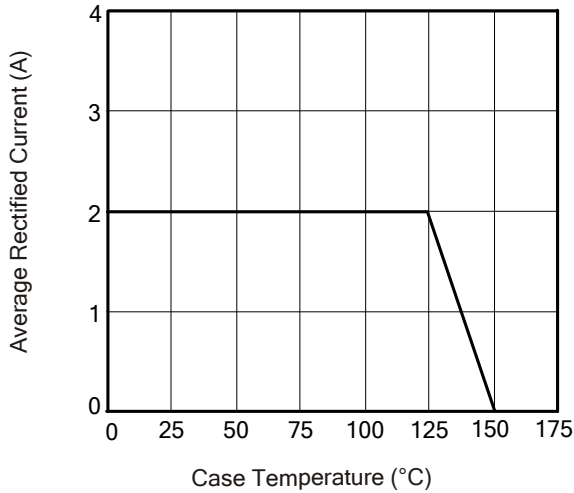
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop	V_{FM}	$I_F=2.0\text{A}$			0.70	V
Peak Reverse Current at Rated DC Blocking Voltage	I_{RM}	$T_A=25^\circ\text{C}$			0.5	mA
Junction Capacitance (Note 2)	C_J			190		pF

Notes: 1. Pulse width \leq 300 μs , duty cycle \leq 2%.

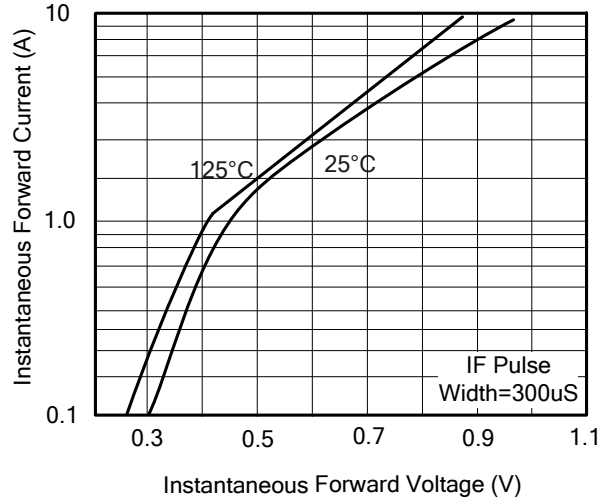
2. Measured at 1.0MHz and applied reverse voltage of 5.0V DC.

■ TYPICAL CHARACTERISTICS

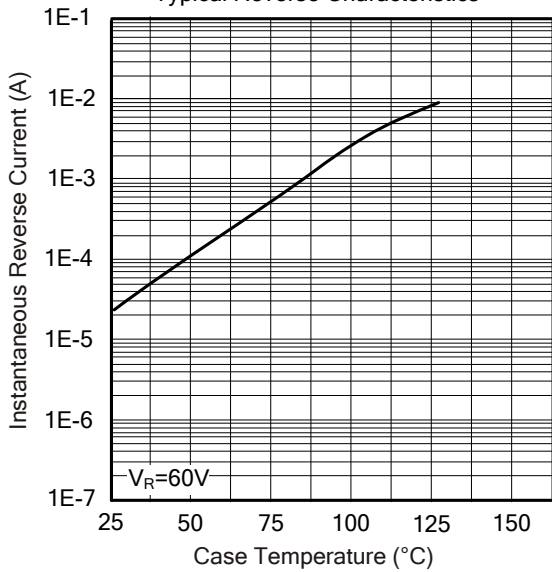
Forward Derating Curve



Typical Forward Characteristics



Typical Reverse Characteristics



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