



SB8U60

Preliminary

DIODE

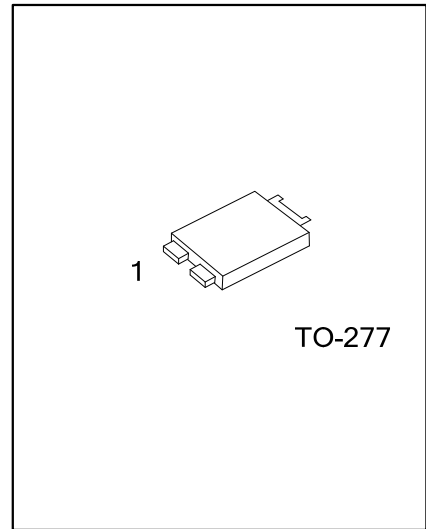
8A SCHOTTKY BARRIER RECTIFIER

■ DESCRIPTION

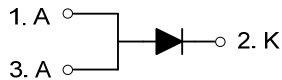
The UTC **SB8U60** is a 8A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with sort, fast switching capability and low forward voltage drop, etc.

■ FEATURES

- * Sort, fast switching capability * High efficiency
- * Low forward voltage drop



■ SYMBOL



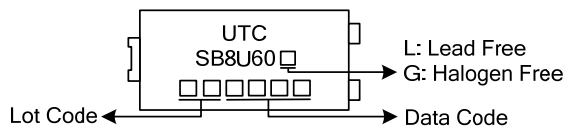
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
SB8U60L-T27-R	SB8U60G-T27-R	TO-277	A	K	A	Tape Reel

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

<p>SB8U60L-T27-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) T27: TO-227 (3) L: Lead Free, G: Halogen Free and Lead Free
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■ MARKING



■ 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
Peak Repetitive Reverse Voltage	V_{RRM}	60	V
Working Peak Reverse Voltage	V_{RWM}	60	V
DC Blocking Voltage	V_{RM}	60	V
Average Rectified Output Current	I_O	8	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	280	A
Operating Junction Temperature	T_J	-65~ +150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65~ +150	$^{\circ}\text{C}$

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 CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	60	$^{\circ}\text{C}/\text{W}$
Junction to Case (Note)	θ_{JC}	13	$^{\circ}\text{C}/\text{W}$

Note: Polyimide PCB, 2 oz. Copper.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop	V_F	$I_F=1.0\text{A}, T_J=25^{\circ}\text{C}$		0.30	0.35	V
		$I_F=8\text{A}, T_J=25^{\circ}\text{C}$		0.46	0.53	V
		$I_F=8\text{A}, T_J=125^{\circ}\text{C}$			0.5	V
Reverse Current (Note 2)	I_R	$V_R=60\text{V}, T_J=25^{\circ}\text{C}$		0.12	0.6	mA
		$V_R=60\text{V}, T_J=125^{\circ}\text{C}$			100	mA

Notes: 1. Theoretical θ_{JS} calculated from the top center of the die straight down to the PCB cathode tab solder junction.

2. Short duration pulse test used to minimize self-heating effect.

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