



## SBL3060C

Preliminary

DIODE

### 30A SCHOTTKY BARRIER RECTIFIER

#### DESCRIPTION

The UTC **SBL3060C** is a 30A 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 **SBL3060C** is suitable for 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

#### SYMBOL



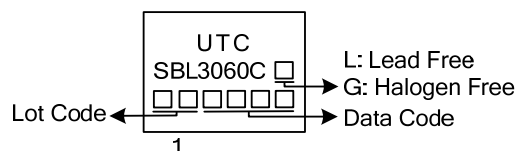
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
SBL3060CL-TA3-T	SBL3060CG-TA3-T	TO-220	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>SBL3060CL-TA3-T</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) T: Tube (2) TA3: TO-220 (3) L: Lead Free, G: Halogen Free and Lead Free</p>
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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
DC Blocking Voltage		$V_R$	60	V
Working Peak Reverse Voltage		$V_{RWM}$	60	V
Peak Repetitive Reverse Voltage		$V_{RRM}$	60	V
RMS Reverse Voltage		$V_{R(RMS)}$	42	V
Average Rectified Output Current (Note 2) $T_C = 105^{\circ}\text{C}$	Per Leg	$I_O$	15	A
	Total		30	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		$I_{FSM}$	165	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 DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	$\theta_{JA}$	50	$^{\circ}\text{C/W}$
Junction to Case (Note 1)	$\theta_{JC}$	3	$^{\circ}\text{C/W}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage Drop	$V_F$	$I_F=15\text{A}$ , $T_C=25^{\circ}\text{C}$			0.73	V
Instantaneous Reverse Current (Note 3)	$I_R$	$V_R=60\text{V}$ , $T_C=25^{\circ}\text{C}$			100	$\mu\text{A}$
		$V_R=60\text{V}$ , $T_C=100^{\circ}\text{C}$			75	mA

Notes: 1. Thermal resistance junction to case mounted on heatsink.

2. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.

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

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