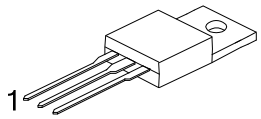
SBL3060C **Preliminary** ***DIODE***

30A SCHOTTKY BARRIER RECTIFIER



TO-220

■ DESCRIPTION

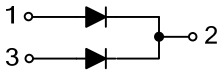
The UTC **SBL3060C** is a 30A schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, high current capability and high efficiency, etc.

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

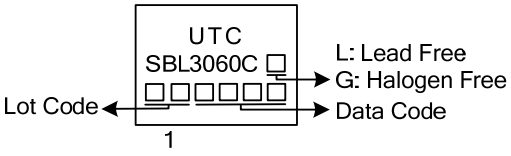
Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
SBL3060CL-TA3-T	SBL3060CG-TA3-T	TO-220	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

SBL3060CL-TA3-T
(1)Packing Type
(2)Packing Type
(3)Green Package

(1) T: Tube
(2) TA3: TO-220
(3) L: Lead Free, G: Halogen Free and Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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°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	°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	θ_{JA}	50	°C/W
Junction to Case (Note 1)	θ_{JC}	3	°C/W

■ ELECTRICAL CHARACTERISTICS (Per Leg) (T_A=25°C unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage Drop	V_F	I_F=15A, T_C=25°C			0.73	V
Instantaneous Reverse Current (Note 3)	I_R	V_R=60V, T_C=25°C			100	μA
		V_R=60V, T_C=100°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.