

UNISONIC TECHNOLOGIES CO., LTD

MBR2060C

20A SCHOTTKY BARRIER RECTIFIER

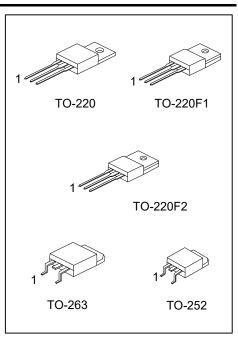
■ DESCRIPTION

The UTC **MBR2060C** is a 20A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with high surge capability, high efficiency, high current capability, low power loss and low forward voltage drop, etc.

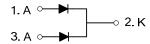
The UTC **MBR2060C** is suitable for free wheeling and polarity protection, etc.

■ FEATURES

- * High surge capability
- * High efficiency
- * High current capability
- * Low power Loss and low forward voltage drop



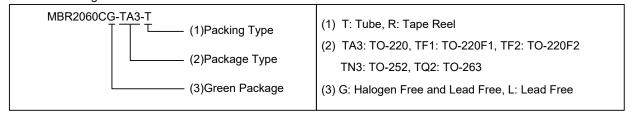
■ SYMBOL



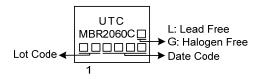
■ ORDERING INFORMATION

Ordering Number		Dookogo	Pin Assignment			Dealóna	
Lead Free	Halogen Free	Package	1	2	3	Packing	
MBR2060CL-TA3-T	MBR2060CG-TA3-T	TO-220	Α	K	Α	Tube	
MBR2060CL-TF1-T	MBR2060CG-TF1-T	TO-220F1	Α	K	Α	Tube	
MBR2060CL-TF2-T	MBR2060CG-TF2-T	TO-220F2	Α	K	Α	Tube	
MBR2060CL-TN3-R	MBR2060CG-TN3-R	TO-252	Α	K	Α	Tape Reel	
MBR2060CL-TQ2-T	MBR2060CG-TQ2-T	TO-263	Α	K	Α	Tube	
MBR2060CL-TQ2-R	MBR2060CG-TQ2-R	TO-263	Α	K	Α	Tape Reel	

Note: Pin Assignment: A: Anode K: Cathode



■ MARKING



www.unisonic.com.tw 1 of 3

MBR2060C

■ A BSOLUTE MAXIMUM RATING (T_A=25°C, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Peak Repetitive Reverse Voltage		V_{RRM}	60	V
Working Peak Reverse Voltage		V_{RWM}	60	V
DC Blocking Voltage		V_R	60	٧
RMS Reverse Voltage		$V_{R(RMS)}$	42	٧
Average Forward Rectified Output	Per Leg		10	Α
Current (T _C =125°C)	Total	Io	20	Α
Non-Repetitive Peak Forward Surge			150	_
Current 8.3ms Single half sine-wave		I _{FSM}	150	Α
Typical Junction Capacitance		Сл	650	pF
Junction Temperature		T_J	-55 ~ + 150	Ô
Storage Temperature		T _{STG}	-55 ~ +150	°C

Note: 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.

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage Drop (Note 2)	V _F	I _F =10A, T _C =25°C			0.80	V
		I _F =10A, T _C =125°C			0.70	V
		I _F =20A, T _C =25°C			0.95	V
		I _F =20A, T _C =125°C			0.85	٧
Instantaneous Reverse Current (Note 2)	l le	Rated DC Voltage, T _C =25°C			0.1	mA
		Rated DC Voltage, T _C =125°C			15	mA

Notes: 1. 2.0 μ s Pulse Width, f = 1.0KHz.

■ THERMAL DATA

PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Ambient	TO-220/TO-220F TO-220F1/TO-263	θ_{JA}	60	°C/W
	TO-252		100	°C/W
Junction to Case	TO-220/TO-263		2	°C/W
	TO-220F/TO-220F1	θ_{JC}	4	°C/W
	TO-252		2.5	°C/W

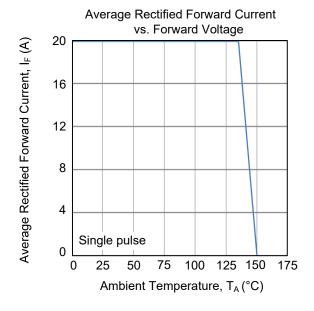
^{2.} Pulse width≤300µs, duty cycle≤2%.

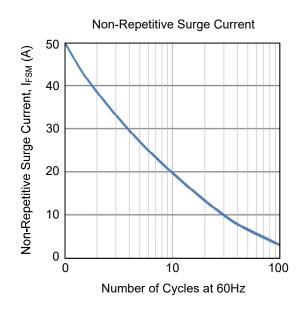
^{2.} Pulse Test: Pulse Width = 300µs, Duty Cycle ≤ 2.0%.

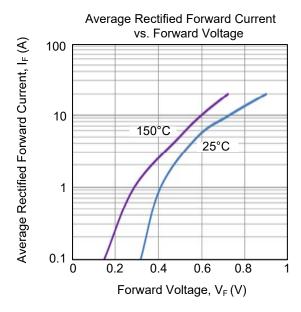
^{3.} Applied $V_R = 4.0V$ and f = 1.0MHz.

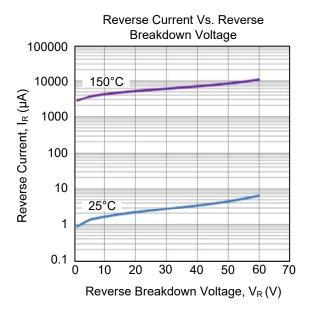
MBR2060C

■ TYPICAL CHARACTERISTICS









UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.