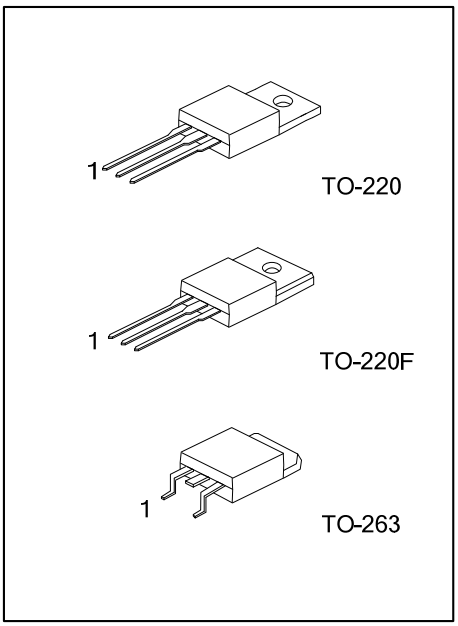
MOS GATED BARRIER RECTIFIER



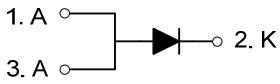
■ DESCRIPTION

The UTC **MGBR40L250** is a surface mount mos gatedbarrier rectifier,it uses UTC's advanced technology to provide customers withlow forward voltage drop and high switching speed, etc.

■ FEATURES

* Low forward voltage drop
* High switching speed

■ SYMBOL



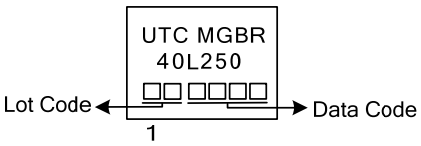
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MGBR40L250L-TA3-T	MGBR40L250G-TA3-T	TO-220	A	K	A	Tube
MGBR40L250L-TF3-R	MGBR40L250G-TF3-R	TO-220F	A	K	A	Tape Reel
MGBR40L250L-TQ2-T	MGBR40L250G-TQ2-T	TO-263	A	K	A	Tube
MGBR40L250L-TQ2-R	MGBR40L250G-TQ2-R	TO-263	A	K	A	Tape Reel

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

MGBR40L250L-TA3-T (1)Packing Type (2)Package Type (3)Green Package	(1) T: Tube, R: Tape Reel (2) TA3: TO-220, TF3: TO-220F, TQ2: TO-263 (3) L: Lead Free, G: Halogen Free and Lead Free

■ MARKING



Copyright © 2016 Unisonic Technologies Co., Ltd

■ 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_{RM}	250	V
Working Peak Reverse Voltage	V_{RWM}	250	V
Repetitive Peak Reverse Voltage	V_{RRM}	250	V
Average Rectified Output Current	I_O	40	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	150	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 CHARACTERISTICS (PER LEG)

PARAMETER		SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	TO-220	θ_{JC}	2	°C/W
	TO-220F		4	°C/W
	TO-263		3	°C/W

■ ELECTRICAL CHARACTERISTICS (PER LEG) (T_A=25°C,unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=0.5mA	250			V
Instantaneous Forward Voltage	V_{FM}	I_F=40A, T_J=25°C			0.97	V
		I_F=40A, T_J=125°C			0.86	V
Leakage Current	I_{RM}	V_R=250V, T_J=25°C			250	μA
		V_R=250V, T_J=125°C			30	mA

Note: Pulse Test: Pulse width ≤ 300μs, Duty cycle ≤ 2%.

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. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.