

**MGBR40L150C**

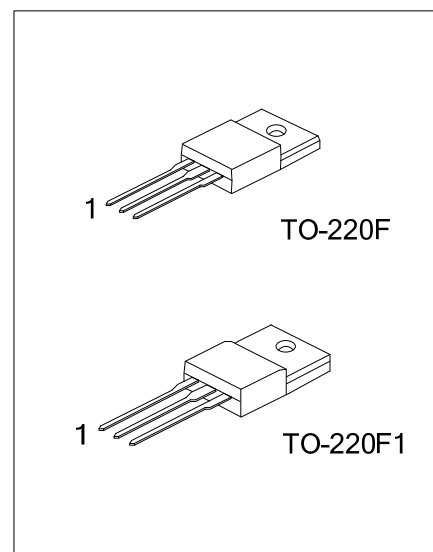
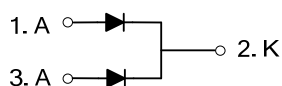
Preliminary

DIODE**MOS GATED BARRIER
RECTIFIER****DESCRIPTION**

The UTC **MGBR40L150C** is a surface mount mos gated barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high switching speed, etc.

FEATURES

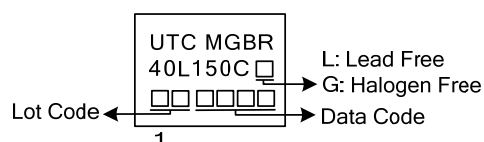
- * Low forward voltage drop
- * High switching speed

SYMBOL**ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MGBR40L150CL-TF1-T	MGBR40L150CG-TF1-T	TO-220F1	A	K	A	Tube
MGBR40L150CL-TF3-T	MGBR40L150CG-TF3-T	TO-220F	A	K	A	Tube

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

MGBR40L150CG-TF1-T	(1) Packing Type	(1) T: Tube
	(2) Package Type	(2) TF1: TO-220F1, TF3: TO-220F
	(3) Green Package	(3) G: Halogen Free and Lead Free, L: 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
Repetitive Peak Reverse Voltage	V _{RRM}	150	V
Average Rectified Output Current Per Device	Per Leg	20	A
	Total	40	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	200	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	θ _{JC}	4	°C/W

■ ELECTRICAL CHARACTERISTICS (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	150			V
Forward Voltage Drop	V _{FM}	I _F =5A, T _J =25°C		0.70		V
		I _F =5A, T _J =125°C		0.58		V
		I _F =10A, T _J =25°C		0.76		V
		I _F =10A, T _J =125°C		0.64		V
		I _F =20A, T _J =25°C		0.84	0.90	V
		I _F =20A, T _J =125°C		0.74	0.82	V
Leakage Current	I _{RM}	V _R =150V, T _J =25°C		0.50	100	μA
		V _R =150V, T _J =125°C		0.05	15	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.