

**TGBR30L60**

Preliminary

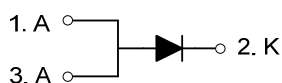
DIODE**TRENCH MOS SCHOTTKY
BARRIER RECTIFIER****DESCRIPTION**

The UTC **TGBR30L60** is a trench mos schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high current capability, etc.

The UTC **TGBR30L60** suitable for free wheeling, high frequency inverters, polarity protection, and low voltage.

FEATURES

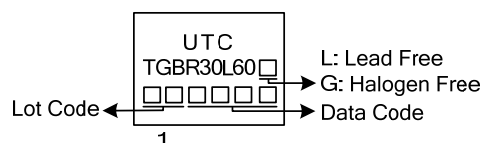
- * Low forward voltage drop
- * High current capability
- * High surge capability
- * High efficiency

SYMBOL**ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR30L60L-TA3-T	TGBR30L60G-TA3-T	TO-220	A	K	A	Tube
TGBR30L60L-TF3-T	TGBR30L60G-TF3-T	TO-220F	A	K	A	Tube
TGBR30L60L-TM3-T	TGBR30L60G-TM3-T	TO-251	A	K	A	Tube
TGBR30L60L-TN3-R	TGBR30L60G-TN3-R	TO-252	A	K	A	Tape Reel

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

TGBR30L60L-TA3-T (1) Packing Type (2) Package Type (3) Green Package	(1) T: Tube, R: Tape Reel (2) TA3: TO-220, TF3: TO-220F, TM3: TO-251, TN3: TO-252 (3) L: Lead Free, G: Halogen Free and Lead Free
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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 (Note 1)	V _{RM}	60	V
Working Peak Reverse Voltage	V _{RWM}	60	V
Peak Repetitive Reverse Voltage	V _{RRM}	60	V
Average Rectified Output Current	I _O	30	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	220	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	2	°C/W
	TO-220F	4	°C/W
	TO-251	6	°C/W
	TO-252		

■ 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 =0.50mA	60			V
Forward Voltage Drop	V _{FM}	I _F =5A, T _C =25°C		0.40		V
		I _F =5A, T _C =125°C		0.30		V
		I _F =15A, T _C =25°C		0.46		V
		I _F =15A, T _C =125°C		0.39		V
		I _F =30A, T _C =25°C		0.52	0.65	V
		I _F =30A, T _C =125°C		0.46	0.60	V
Leakage Current	I _{RM}	V _R =60V, T _C =25°C		20	300	μA
		V _R =60V, T _C =125°C		10	100	mA

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

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