



TGBR4L60

Advance

DIODE

TRENCH MOS SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

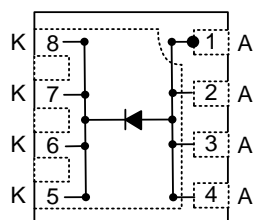
The UTC **TGBR4L60** is a trench mos schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high current capability, etc.

The UTC **TGBR4L60** 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



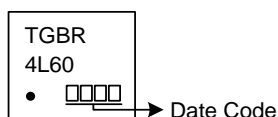
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment								Packing
Lead Free	Halogen Free		1	2	3	4	5	6	7	8	
TGBR4L60L-K08-3030-R	TGBR4L60G-K08-3030-R	DFN3030-8	A	A	A	A	K	K	K	K	Tape Reel

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

<p>TGBR4L60G-K08-3030-R</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p>		<p>(1) R: Tape Reel</p> <p>(2) K08-3030: DFN3030-8</p> <p>(3) G: Halogen Free and Lead Free, L: Lead Free</p>
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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	4	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	25	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}	10 (Note.)	°C/W

Note: FR-4 PCB, 2 oz Copper. Minimum recommended pad layout.

■ 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 =4A, T _C =25°C			0.52	V
		I _F =4A, T _C =125°C		0.45		V
Leakage Current (Note 1)	I _{RM}	V _R =60V, T _C =25°C		30	150	μA
		V _R =60V, T _C =125°C		6		mA
Total Capacitance	C _T	V _R =5.0V, f=1MHz		180		pF

Notes: 1. Short duration pulse test used to minimize self-heating effect.

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

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