

**TGBR5U45**

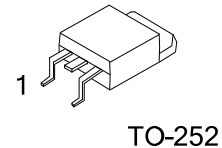
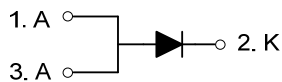
Preliminary

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

The UTC **TGBR5U45** is a trench mos schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high switching speed, etc.

FEATURES

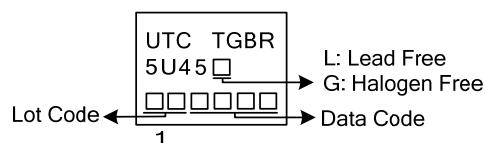
- * Ultra low forward voltage drop
- * High switching speed

SYMBOL**ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR5U45L-TN3-R	TGBR5U45G-TN3-R	TO-252	A	K	A	Tape Reel

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

TGBR5U45L-TN3-R (1)Packing Type (2)Package Type (3)Green Package		(1) R: Tape Reel (2) 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	V _{RM}	45	V
Working Peak Reverse Voltage	V _{RWM}	45	V
Repetitive Peak Reverse Voltage	V _{RRM}	45	V
Average Rectified Output Current	I _O	5	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	120	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}	6	°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	45			V
Forward Voltage Drop	V _{FM}	I _F =5A, T _J =25°C			0.48	V
		I _F =5A, T _J =125°C			0.43	V
Leakage Current	I _{RM}	V _R =45V, T _J =25°C			500	μA
		V _R =45V, T _J =125°C			30	mA

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

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