



## TGBR10S60

DIODE

### TRENCH MOS SCHOTTKY BARRIER RECTIFIER

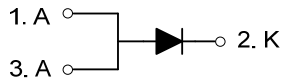
#### DESCRIPTION

The UTC **TGBR10S60** 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

- \* Super low forward voltage drop
- \* High current capability
- \* High surge capability
- \* High efficiency

#### SYMBOL

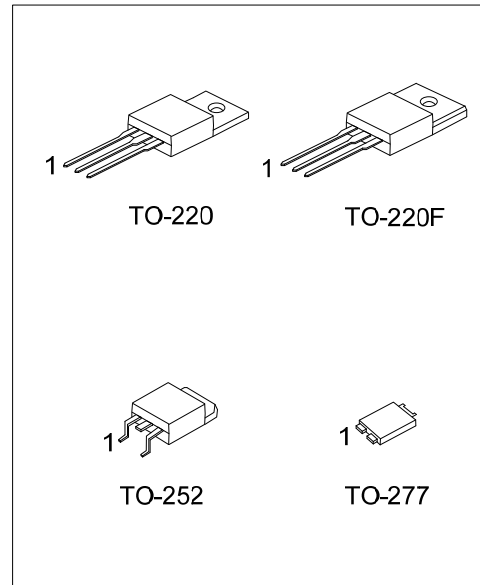


#### ORDERING INFORMATION

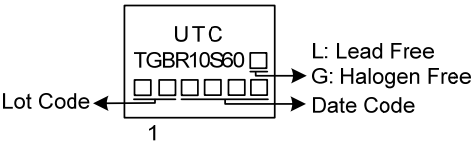
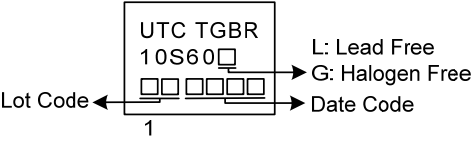
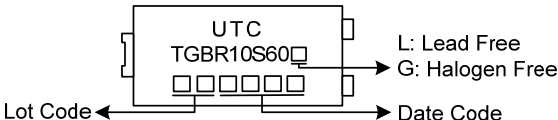
Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR10S60L-TA3-T	TGBR10S60G-TA3-T	TO-220	A	K	A	Tube
TGBR10S60L-TF3-T	TGBR10S60G-TF3-T	TO-220F	A	K	A	Tube
TGBR10S60L-TN3-R	TGBR10S60G-TN3-R	TO-252	A	K	A	Tape Reel
TGBR10S60L-T27-R	TGBR10S60G-T27-R	TO-277	A	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>TGBR10S60G-TA2-T</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) T: Tube, R: Tape Reel (2) TA3: TO-220, TF3: TO-220F, TN3: TO-252 T27: TO-277 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING

PACKAGE	MARKING
TO-220 / TO-220F	
TO-252	
TO-277	

■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=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 <sub>RM</sub>	60	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	60	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	60	V
Average Rectified Output Current	I <sub>o</sub>	10	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	150	A
Operating Junction Temperature	T <sub>J</sub>	-40 ~ +125	°C
Storage Temperature	T <sub>STG</sub>	-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-252	6	°C/W
	TO-277	13 (Note)	°C/W

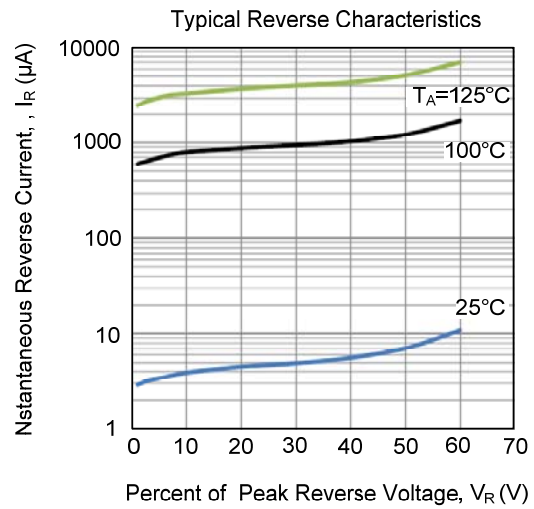
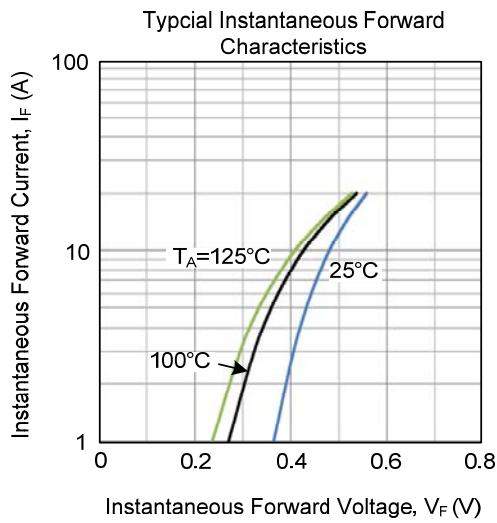
Note: FR-4 PCB, 2 oz Copper. Minimum recommended pad layout.

■ ELECTRICAL CHARACTERISTICS (PER LEG) (T<sub>A</sub>=25°C, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =0.50mA	60			V
Forward Voltage Drop	V <sub>FM</sub>	I <sub>F</sub> =10A, T <sub>C</sub> =25°C			0.5	V
		I <sub>F</sub> =10A, T <sub>C</sub> =100°C			0.48	V
Leakage Current	I <sub>RM</sub>	V <sub>R</sub> =60V, T <sub>C</sub> =25°C			100	μA
		V <sub>R</sub> =60V, T <sub>C</sub> =100°C			100	mA

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

■ TYPICAL CHARACTERISTICS



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