

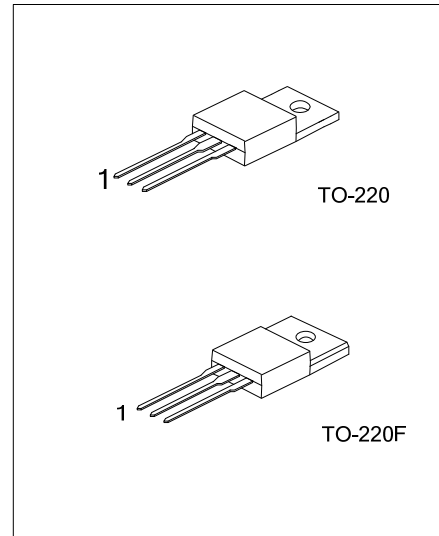


**TGBR20U60C**

Preliminary

**DIODE**

**DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER**



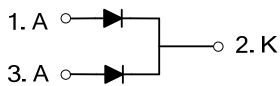
■ DESCRIPTION

The UTC **TGBR20U60C** is a dual 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



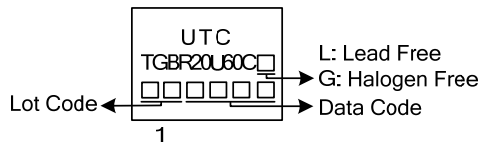
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR20U60CL-TA3-T	TGBR20U60CG-TA3-T	TO-220	A	K	A	Tube
TGBR20U60CL-TF3-T	TGBR20U60CG-TF3-T	TO-220F	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>TGBR20U60CL-TA3-T</p>	<p>(1) T: Tube</p> <p>(2) TA3: TO-220, TF3: TO-220F</p> <p>(3) L: Lead Free, G: Halogen Free and Lead Free</p>
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■ MARKING



■ 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	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 Per Device	Per Leg	10	A
	Total	20	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>	-65 ~ +150	°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	

■ 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>J</sub> =25°C			0.45	V
		I <sub>F</sub> =10A, T <sub>J</sub> =125°C			0.4	V
Leakage Current	I <sub>RM</sub>	V <sub>R</sub> =60V, T <sub>J</sub> =25°C			500	μA
		V <sub>R</sub> =60V, T <sub>J</sub> =125°C			50	mA

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

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