

# UNISONIC TECHNOLOGIES CO., LTD

TGBR20L60C

# **Preliminary**

**DIODE** 

# **DUAL TRENCH MOS SCHOTTKY**

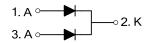
#### ■ DESCRIPTION

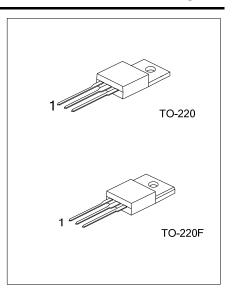
The UTC **TGBR20L60C** is a dual trench mos schottky, it uses UTC's advanced technology to provide customers with high current capability, low forward voltage and high switching speed, etc.

#### ■ FEATURES

- \* Low forward voltage
- \* High switching speed
- \* High current capability

#### ■ SYMBOL

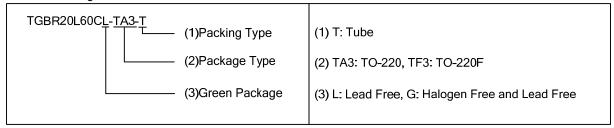




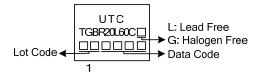
#### ORDERING INFORMATION

Ordering Number		Dookogo	Pin Assignment			Dooking	
Lead Free	Halogen Free	Package	1	2	3	Packing	
TGBR20L60CL-TA3-T	TGBR20L60CG-TA3-T	TO-220	Α	K	Α	Tube	
TGBR20L60CL-TF3-T	TGBR20L60CG-TF3-T	TO-220F	Α	K	Α	Tube	

Note: Pin Assignment: A: Anode K: Cathode



#### ■ MARKING



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# ■ ABSOLUTE MAXIMUM RATINGS (PER LEG) (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		$V_{RM}$	60	V	
Working Peak Reverse Voltage		$V_{RWM}$	60	V	
Peak Repetitive Reverse Voltage		$V_{RRM}$	60	V	
Average Destified Ferward Current	Per Leg	Io	10	Α	
Average Rectified Forward Current	Total		20	Α	
Peak Forward Surge Current		I <sub>FSM</sub>	150	Α	
Operating Junction Temperature		TJ	-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	
Junction to Ambient		$\theta_{JA}$	62.5	°C/W	
lunation to Coop	TO-220	θјс	2	°CAM	
Junction to Case	TO-220F		3.31	°C/W	

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	I <sub>R</sub> =0.50mA	60			>
Instantance of Familiary Valters	I VEM	I <sub>F</sub> =10A, T <sub>J</sub> =25°C			0.64	V
nstantaneous Forward Voltage		I <sub>F</sub> =10A, T <sub>J</sub> =125°C			0.59	V
stantaneous Reverse Current (Note 1)	DM	V <sub>RM</sub> =60V, T <sub>J</sub> =25°C			300	μA
		V <sub>RM</sub> =60V, T <sub>J</sub> =125°C			20	mΑ

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

<sup>2.</sup> Thermal resistance junction to case mounted on heatsink.

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