

**TGBR40U60C**

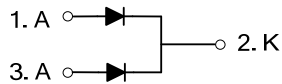
Preliminary

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

The UTC **TGBR40U60C** 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

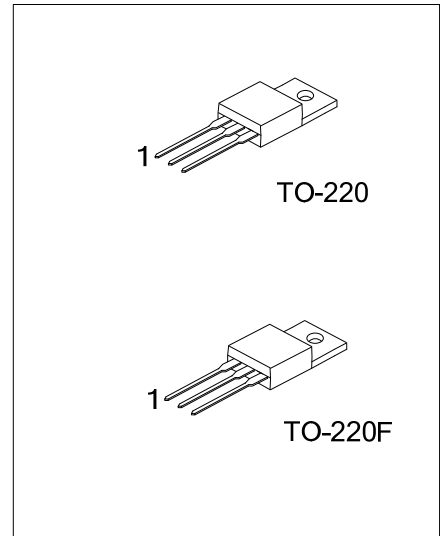
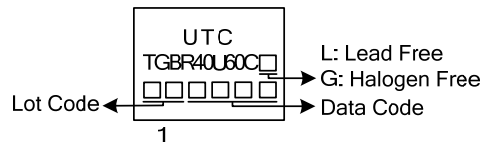
- * Ultra low forward voltage drop
- * High switching speed

SYMBOL**ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR40U60CL-TA3-T	TGBR40U60CG-TA3-T	TO-220	A	K	A	Tube
TGBR40U60CL-TF3-T	TGBR40U60CG-TF3-T	TO-220F	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

TGBR40U60CL-TA3-T (1) Packing Type (2) Package Type (3) Green Package	(1) T: Tube (2) TA3: TO-220, TF3: TO-220F (3) L: Lead Free, G: Halogen Free and Lead Free
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MARKING

■ ABSOLUTE MAXIMUM RATINGS (PER LEG) ($T_A=25^{\circ}\text{C}$ 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 Rectified Output Current Per Device	Per Leg	20	A
	Total	40	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	270	A
Operating Junction Temperature	T_J	$-65 \sim +150$	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	$-65 \sim +150$	$^{\circ}\text{C}$

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	$^{\circ}\text{C}/\text{W}$
	TO-220F	4	

■ ELECTRICAL CHARACTERISTICS (PER LEG) ($T_A=25^{\circ}\text{C}$ unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=0.50\text{mA}$	60			V
Forward Voltage Drop	V_{FM}	$I_F=5\text{A}, T_J=25^{\circ}\text{C}$		0.41		V
		$I_F=5\text{A}, T_J=125^{\circ}\text{C}$		0.31		V
		$I_F=10\text{A}, T_J=25^{\circ}\text{C}$		0.46		V
		$I_F=10\text{A}, T_J=125^{\circ}\text{C}$		0.38		V
		$I_F=20\text{A}, T_J=25^{\circ}\text{C}$			0.55	V
		$I_F=20\text{A}, T_J=125^{\circ}\text{C}$			0.50	V
Leakage Current	I_{RM}	$V_R=60\text{V}, T_J=25^{\circ}\text{C}$			500	μA
		$V_R=60\text{V}, T_J=125^{\circ}\text{C}$			100	mA

Note: Pulse Test: Pulse width $\leq 300\mu\text{s}$, Duty cycle $\leq 2\%$.

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