



TGBR40U60C

Preliminary

DIODE

DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER

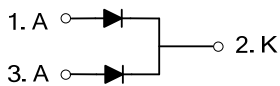
■ DESCRIPTION

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



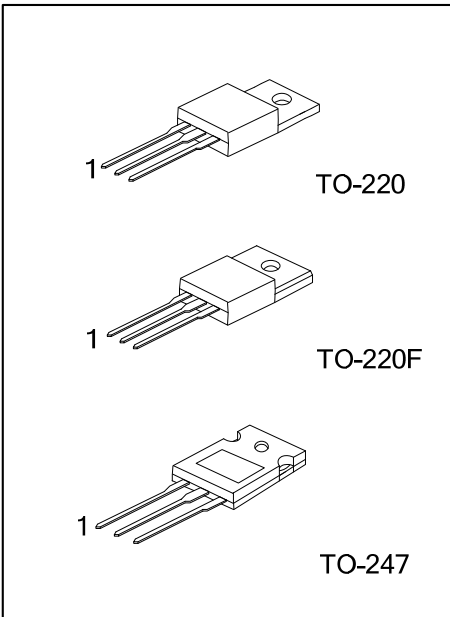
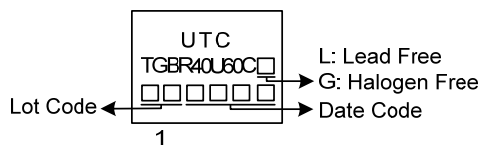
■ ORDERING INFORMATION

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
TGBR40U60CL-T47-T	TGBR40U60CG-T47-T	TO-247	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>TGBR40U60CG-TA3-T</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Green Package</p>	<p>(1) T: Tube</p> <p>(2) TA3: TO-220, TF3: TO-220F, T47: TO-247</p> <p>(3) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (PER LEG) (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}	60	V
Working Peak Reverse Voltage		V _{RWM}	60	V
Peak Repetitive Reverse Voltage		V _{RPM}	60	V
Average Rectified Output Current Per Device	Per Leg	I _O	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 ~ +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	TO-220	θ _{JC}	2	°C/W
	TO-220F		4	°C/W
	TO-247		1.5	°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 =0.50mA	60			V
Forward Voltage Drop	V _{FM}	I _F =5A, T _J =25°C		0.41		V
		I _F =5A, T _J =125°C		0.31		V
		I _F =10A, T _J =25°C		0.46		V
		I _F =10A, T _J =125°C		0.38		V
		I _F =20A, T _J =25°C			0.55	V
		I _F =20A, T _J =125°C			0.50	V
Leakage Current	I _{RM}	V _R =60V, T _J =25°C			500	μA
		V _R =60V, T _J =125°C			100	mA

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

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