



TGBR40V60C

Preliminary

DIODE

DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER

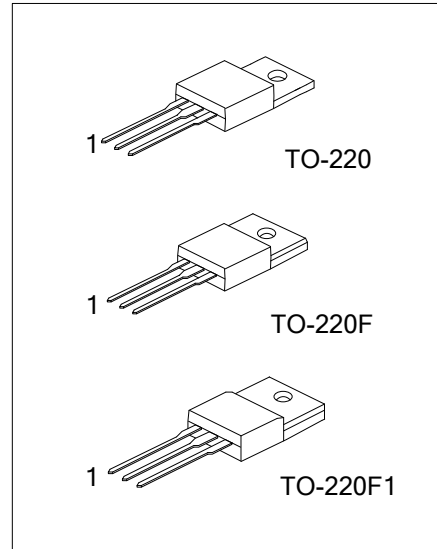
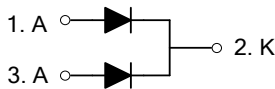
DESCRIPTION

The UTC **TGBR40V60C** 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

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

SYMBOL



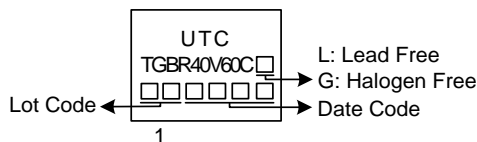
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR40V60CL-TA3-T	TGBR40V60CG-TA3-T	TO-220	A	K	A	Tube
TGBR40V60CL-TF1-T	TGBR40V60CG-TF1-T	TO-220F1	A	K	A	Tube
TGBR40V60CL-TF3-T	TGBR40V60CG-TF3-T	TO-220F	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

TGBR40V60CG-TA3-T	(1)Packing Type	(1) T: Tube
	(2)Package Type	(2) TA3: TO-220, TF1: TO-220F1, TF3: TO-220F
	(3)Green Package	(3) G: Halogen Free and Lead Free, L: Lead Free

MARKING



■ ABSOLUTE MAXIMUM RATINGS (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 _{RRM}	60	V
Average Rectified Output Current (T _C =140°C)	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}	250	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
Junction to Ambient		θ _{JA}	62.5	°C/W
Junction to Case	TO-220	θ _{JC}	2	°C/W
	TO-220F		3.31	
	TO-220F1			

■ ELECTRICAL CHARACTERISTICS (Per Leg) (T_A=25°C, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	V _{(BR)R}	I _R =0.50mA	60			V
Forward Voltage Drop	V _{FM}	I _F =20A, T _J =25°C			0.65	V
		I _F =20A, T _J =125°C			0.60	V
Leakage Current (Note 1)	I _{RM}	V _R =60V, T _J =25°C			500	μA
		V _R =60V, T _J =125°C			100	mA

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

2. Thermal resistance junction to case mounted on heatsink.

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