



## TGBR40S80C

DIODE

### DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER

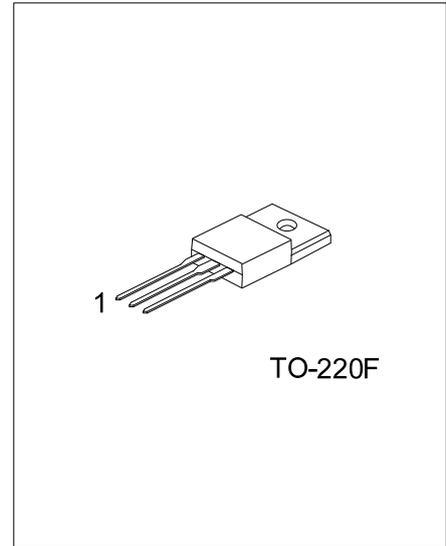
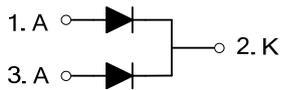
#### DESCRIPTION

The UTC **TGBR40S80C** 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

- \* Super low forward voltage drop
- \* High switching speed

#### SYMBOL



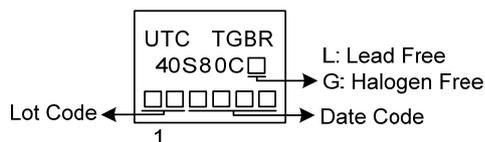
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR40S80CL-TF3-T	TGBR40S80CG-TF3-T	TO-220F	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>TGBR40S80CG-TF3-T</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p>	<p>(1) T: Tube</p> <p>(2) TF3: TO-220F</p> <p>(3) G: Halogen Free and Lead Free, L: 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>	80	V
Average Rectified Output Current (T <sub>C</sub> =140°C)	Per Leg	I <sub>O</sub>	20	A
	Total		40	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I <sub>FSM</sub>	120	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)

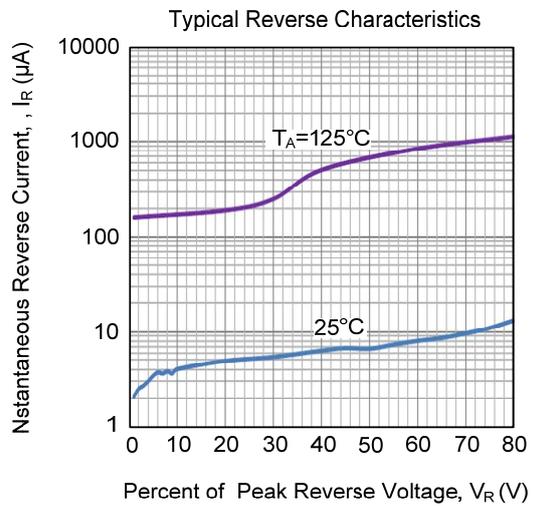
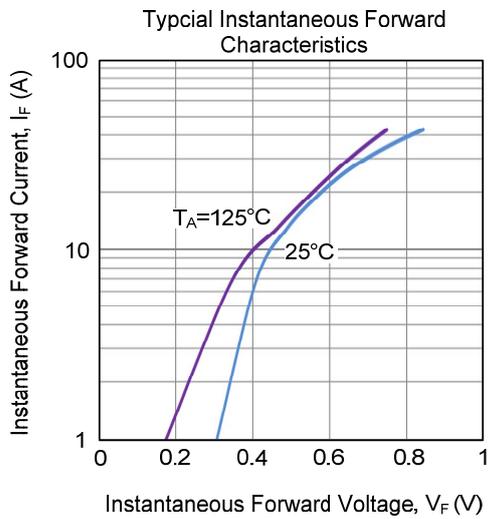
PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	θ <sub>JC</sub>	2	°C/W

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =0.5mA	80			V
Forward Voltage Drop	V <sub>FM</sub>	I <sub>F</sub> =20A, T <sub>J</sub> =25°C		0.58	0.65	V
		I <sub>F</sub> =20A, T <sub>J</sub> =125°C			0.62	V
Leakage Current	I <sub>RM</sub>	V <sub>R</sub> =80V, T <sub>J</sub> =25°C			100	μA
		V <sub>R</sub> =80V, T <sub>J</sub> =125°C			10	mA

Notes: 1. Short duration pulse test used to minimize self-heating effect.  
2. Thermal resistance junction to case mounted on heatsink.

■ TYPICAL CHARACTERISTICS



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