



TGBR40S80C

Advance

DIODE

DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER

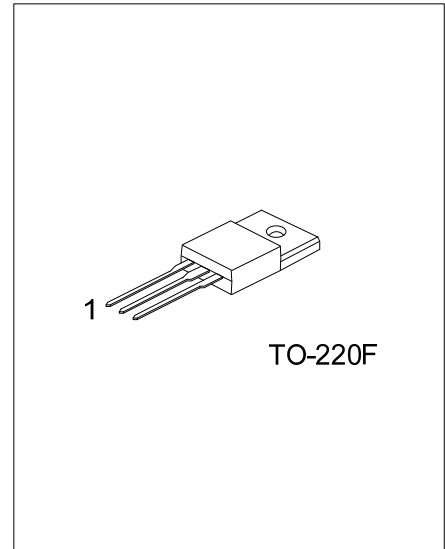
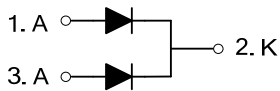
DESCRIPTION

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



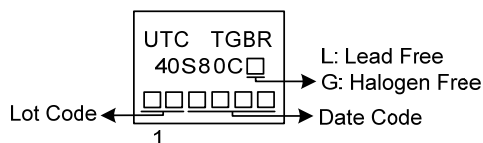
ORDERING INFORMATION

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) 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 ($T_A=25^{\circ}\text{C}$, 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}	80	V
Average Rectified Output Current ($T_C=140^{\circ}\text{C}$)	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}	120	A
Operating Junction Temperature		T_J	-65 ~ +150	$^{\circ}\text{C}$
Storage Temperature		T_{STG}	-65 ~ +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	θ_{JC}	2	$^{\circ}\text{C}/\text{W}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=0.5\text{mA}$	80			V
Forward Voltage Drop	V_{FM}	$I_F=20\text{A}, T_J=25^{\circ}\text{C}$		0.58	0.65	V
		$I_F=20\text{A}, T_J=125^{\circ}\text{C}$			0.62	V
Leakage Current	I_{RM}	$V_R=80\text{V}, T_J=25^{\circ}\text{C}$			100	μA
		$V_R=80\text{V}, T_J=125^{\circ}\text{C}$			10	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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