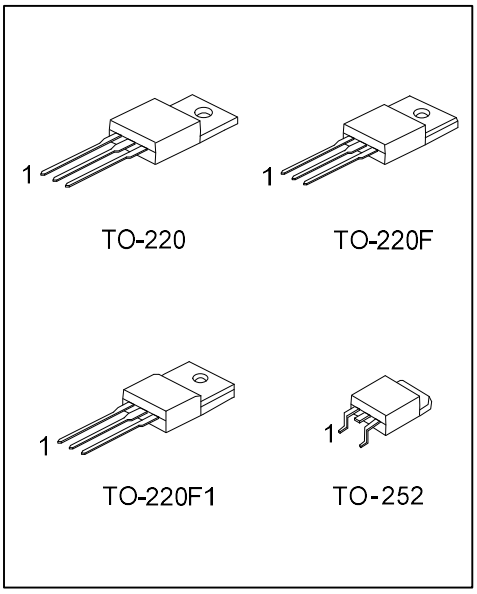
TGBR20S80C

DIODE

DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER



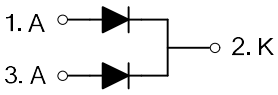
■ DESCRIPTION

The UTC **TGBR20S80C** 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

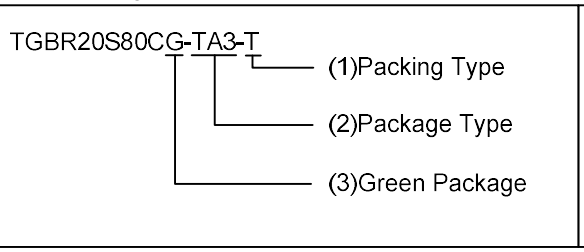
■ SYMBOL



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR20S80CL-TA3-T	TGBR20S80CG-TA3-T	TO-220	A	K	A	Tube
TGBR20S80CL-TF1-T	TGBR20S80CG-TF1-T	TO-220F1	A	K	A	Tube
TGBR20S80CL-TF3-T	TGBR20S80CG-TF3-T	TO-220F	A	K	A	Tube
TGBR20S80CL-TN3-R	TGBR20S80CG-TN3-R	TO-252	A	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

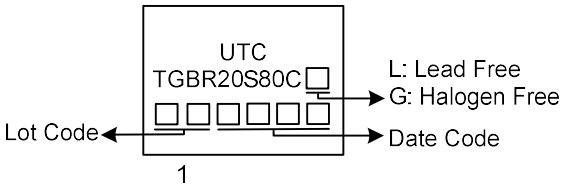
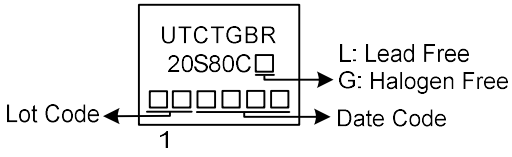


(1) T: Tube, R: Tape Reel

(2) TA3: TO-220, TF1: TO-220F1, TF3: TO-220F, TN3: TO-252

(3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING

TO-220 / TO-220F / TO-220F1	TO-252
	

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■ 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}	80	V
Working Peak Reverse Voltage		V_{RWM}	80	V
Peak Repetitive Reverse Voltage		V_{RRM}	80	V
Average Rectified Output Current (T_C=140°C)	Per Leg	I_O	10	A
	Total		20	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I_{FSM}	180	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)

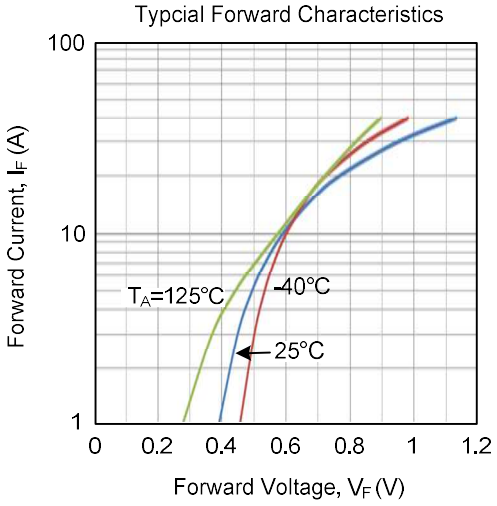
PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Ambient	TO-220	θ_{JA}	2	°C/W
	TO-220F TO-220F1		4	°C/W
	TO-252		6	°C/W

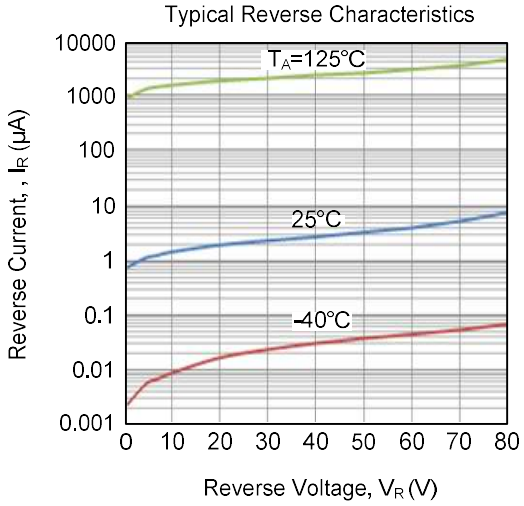
■ ELECTRICAL CHARACTERISTICS (PER LEG) (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=0.5mA	80			V
Forward Voltage Drop	V_{FM}	I_F=10A, T_J=25°C			0.65	V
		I_F=10A, T_J=125°C			0.6	V
Leakage Current	I_{RM}	V_R=80V, T_J=25°C			100	μA
		V_R=80V, T_J=125°C			10	mA

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

■ TYPICAL CHARACTERISTICS





UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.