

UNISONIC TECHNOLOGIES CO., LTD

TGBR10V100C

Preliminary

DIODE

DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER

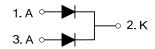
DESCRIPTION

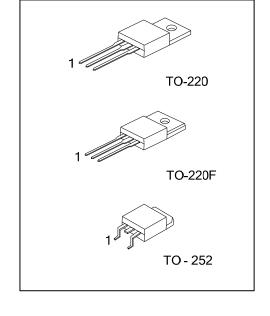
The UTC **TGBR10V100C** is a dual trench mos schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high switching speed, etc.

■ FEATURES

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



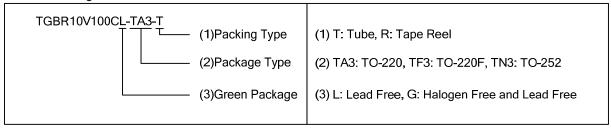




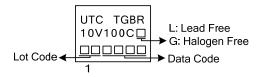
ORDERING INFORMATION

Ordering Number		Dookogo	Pin Assignment			Dooking		
Lead Free		Halogen Free	Package	1	2	3	Packing	
TGBR10V100CL-TA	\3-T T	GBR10V100CG-TA3-T	TO-220	Α	K	Α	Tube	
TGBR10V100CL-TI	3-T T	GBR10V100CG-TF3-T	TO-220F	Α	K	Α	Tube	
TGBR10V100CL-TN	13-R T	GBR10V100CG-TN3-R	TO-252	Α	K	Α	Tape Reel	

Note: Pin Assignment: A: Anode K: Cathode



■ MARKING



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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}	100	V	
Working Peak Reverse Voltage	V_{RWM}	100	V	
Peak Repetitive Reverse Voltage	V_{RRM}	100	V	
Average Rectified Output Current Per Device	Per Leg		5	Α
Average Rectilled Output Current Per Device	Total	Io	10	Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I _{FSM}	110	Α
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	
	TO-220		2	°C/W
Typical Thermal Resistance	TO-220F	θ_{JC}	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 =0.50mA	100			V
Forward Voltage Drop	W	I _F =5A, T _J =25°C			0.72	V
Forward Voltage Drop	V_{FM}	I _F =5A, T _J =125°C			0.66	V
Lookogo Current		V _R =100V, T _J =25°C			100	μΑ
Leakage Current	IRM	V _R =100V, T _J =125°C			30	mΑ

Note: Pulse Test: Pulse width \leq 300 μ s, Duty cycle \leq 2%.

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