

UNISONIC TECHNOLOGIES CO., LTD

TGBR10V120C

Preliminary

DIODE

DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER

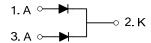
DESCRIPTION

The UTC **TGBR10V120C** 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

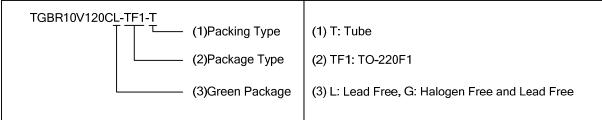
■ SYMBOL



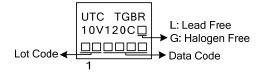
■ ORDERING INFORMATION

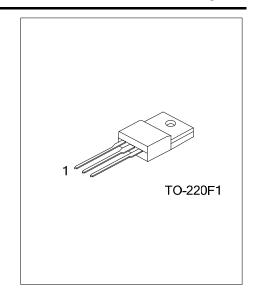
Ordering Number		Dackago	Pin Assignment			Dooking	
Lead Free	Halogen Free	Package	1	2	3	Packing	
TGBR10V120CL-TF1-T	TGBR10V120CG-TF1-T	TO-220F1	Α	K	Α	Tube	

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}	120	V
Working Peak Reverse Voltage		V_{RWM}	120	V
Peak Repetitive Reverse Voltage		V_{RRM}	120	V
Average Rectified Output Current Per	Per Leg		5	Α
Device	Total	I _O	10	Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I _{FSM}	90	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	
Typical Thermal Resistance	TO-220	0	2	°C/W	
	TO-220F	θ _{JC}	4	°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	120			V
Forward Voltage Drop	VEM	I _F =5A, T _J =25°C			0.80	V
		I _F =5A, T _J =125°C			0.75	V
Leakage Current	DM	V _R =120V, T _J =25°C			100	μA
		V _R =120V, T _J =125°C			15	mA

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

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