

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

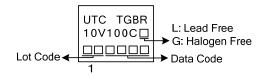
SYMBOL

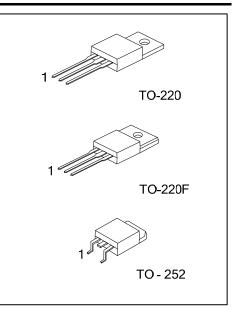
ORDERING INFORMATION							
Ordering Number		Daakaga	Pin Assignment			Dooking	
Lead Free	Halogen Free	Package	1	2	3	Packing	
TGBR10V100CL-TA3-T	TGBR10V100CG-TA3-T	TO-220	Α	К	А	Tube	
TGBR10V100CL-TF3-T	TGBR10V100CG-TF3-T	TO-220F	А	К	А	Tube	
TGBR10V100CL-TN3-R	TGBR10V100CG-TN3-R	TO-252	А	К	А	Tape Reel	

Note: Pin Assignment: A: Anode K: Cathode

TGBR10V100CL-TA3-T	(1)Packing Type	(1) T: Tube, R: Tape Reel
	(2)Package Type	(2) TA3: TO-220, TF3: TO-220F, TN3: TO-252
	(3)Green Package	(3) L: Lead Free, G: Halogen Free and Lead Free

MARKING





Preliminary

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitatice 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 Restified Output Current Per Device Per Leg		5	А			
Average Rectified Output Current Per Device Total	I _O	10	А			
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	110	А			
Operating Junction Temperature	TJ	-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 Valtage Dran	N/	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	
Laskana Current	DM	V _R =100V, T _J =25°C			100	μA
Leakage Current		V _R =100V, T _J =125°C			30	mA

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



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