

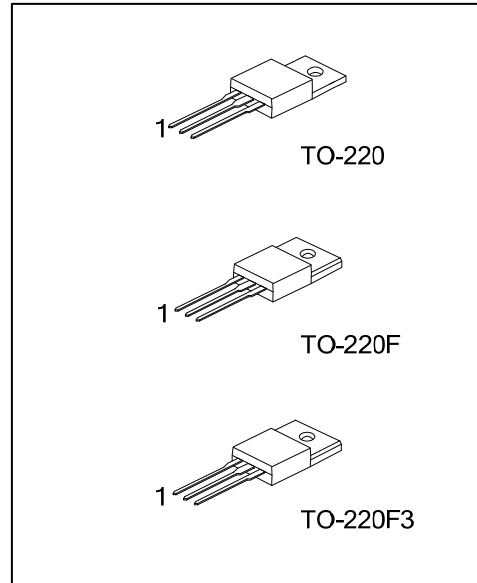


TGBR10S45C

Preliminary

DIODE

**DUAL TRENCH MOS
SCHOTTKY BARRIER
RECTIFIER**



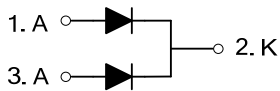
■ **DESCRIPTION**

The UTC **TGBR10S45C** 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**



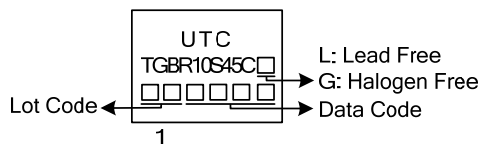
■ **ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR10S45CL-TA3-T	TGBR10S45CG-TA3-T	TO-220	A	K	A	Tube
TGBR10S45CL-TF3-T	TGBR10S45CG-TF3-T	TO-220F	A	K	A	Tube
TGBR10S45CL-TF3T-T	TGBR10S45CG-TF3T-T	TO-220F3	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>TGBR10S45CL-TA3-T</p>	<p>(1) T: Tube</p> <p>(2) TA3: TO-220, TF3: TO-220F, TF3T: TO-220F3</p> <p>(3) L: Lead Free, G: Halogen Free and Lead Free</p>
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■ **MARKING**



■ 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}	45	V
Working Peak Reverse Voltage	V _{RWM}	45	V
Peak Repetitive Reverse Voltage	V _{RRM}	45	V
Average Rectified Output Current (T _C =140°C)	Per Leg	5	A
	Total	10	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	150	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
Typical Thermal Resistance	TO-220	2	°C/W
	TO-220F/TO-220F3	4	

■ 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 =0.45mA	45			V
Forward Voltage Drop	V _{FM}	I _F =5A, T _J =25°C			0.51	V
		I _F =5A, T _J =125°C			0.46	V
Leakage Current	I _{RM}	V _R =45V, T _J =25°C			500	μA
		V _R =45V, T _J =125°C			40	mA

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

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