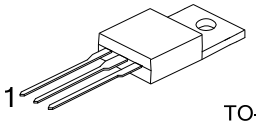
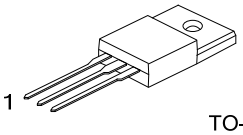
TGBR20L100C

Preliminary ***DIODE***

DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER





■ DESCRIPTION

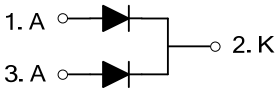
The UTC **TGBR20L100C** is a dual trench mos schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high switching speed, etc.

The UTC **TGBR20L100C** suitable for supply applications.

■ FEATURES

* Low forward voltage drop
* High switching speed

■ SYMBOL



■ ORDERING INFORMATION

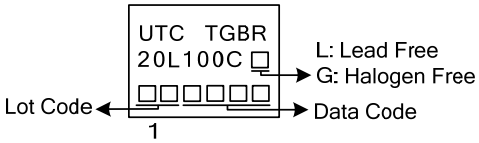
Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR20L100CL-TA3-T	TGBR20L100CG-TA3-T	TO-220	A	K	A	Tube
TGBR20L100CL-TF3-T	TGBR20L100CG-TF3-T	TO-220F	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

TGBR20L100CL-TA3-T

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

■ 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}	100	V
Working Peak Reverse Voltage		V_{RWM}	100	V
Peak Repetitive Reverse Voltage		V_{RRM}	100	V
Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% Duty Cycle	Per Leg	I_O	10	A
	Total		20	A
Peak Forward Surge Current - 1/2 60hz		I_{FSM}	100	A
Operating Junction Temperature		T_J	-65 ~ +150	°C
Storage Junction 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	θ_{JC}	2	°C/W
	TO-220F		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=0.50mA	100			V
Forward Voltage Drop	V_{FM}	I_F=3A, T_J=25°C		0.51		V
		I_F=3A, T_J=125°C		0.46		V
		I_F=5A, T_J=25°C		0.59		V
		I_F=5A, T_J=125°C		0.55		V
		I_F=10A, T_J=25°C		0.76	0.79	V
		I_F=10A, T_J=125°C		0.65	0.72	V
Leakage Current	I_{RM}	V_R=100V, T_J=25°C		10	100	μA
		V_R=100V, T_J=125°C		5	40	mA

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