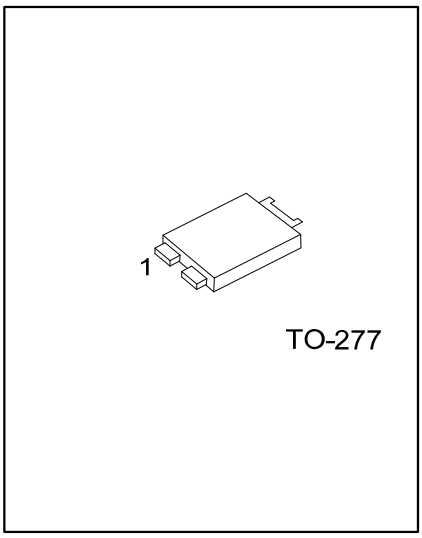
TGBR20U100

Advance ***DIODE***

TRENCH MOS SCHOTTKY BARRIER RECTIFIER



■ DESCRIPTION

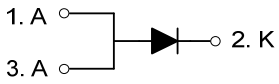
The UTC **TGBR20U100** is a trench mos schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high current capability, etc.

The UTC **TGBR20U100** suitable for free wheeling, high frequency inverters, polarity protection, and low voltage.

■ FEATURES

* Ultra low forward voltage drop
* High current capability
* High surge capability
* High efficiency

■ SYMBOL



■ ORDERING INFORMATION

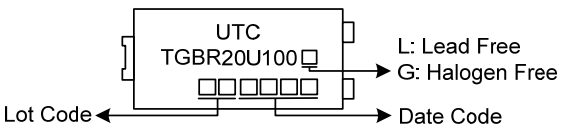
Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR20U100L-T27-R	TGBR20U100G-T27-R	TO-277	A	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

TGBR20U100G-T27-R

(1)Packing Type	(1) R: Tape Reel
(2)Package Type	(2) T27: TO-277
(3)Green Package	(3) G: Halogen Free and Lead Free, L: Lead Free

■ 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	I_O	20	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	300	A
Operating Junction Temperature	T_J	-55 ~ +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 DATA (PER LEG)

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	60	°C/W
Junction to Case	θ_{JC}	3	°C/W

Note: FR-4 PCB, 2 oz Copper. Minimum recommended pad layout.

■ 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=0.1mA	100			V
Forward Voltage Drop	V_{FM}	I_F=20A, T_C=25°C		0.66	0.69	V
		I_F=20A, T_C=125°C		0.58		V
Leakage Current	I_{RM}	V_R=100V, T_C=25°C			50	μA
		V_R=100V, T_C=125°C			10	mA

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

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