



TGBR30L100

DIODE

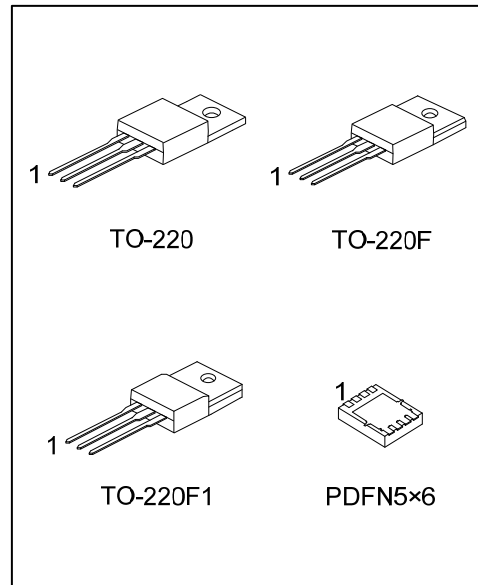
**TRENCH MOS SCHOTTKY
BARRIER RECTIFIER**

■ **DESCRIPTION**

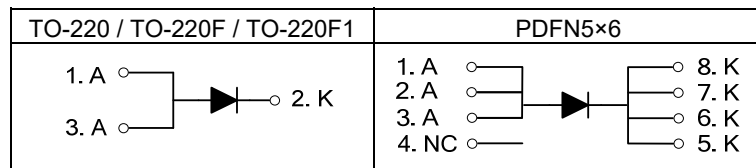
The UTC **TGBR30L100** is a trench mos schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high switching speed, etc.

■ **FEATURES**

- * Low forward voltage drop
- * High switching speed



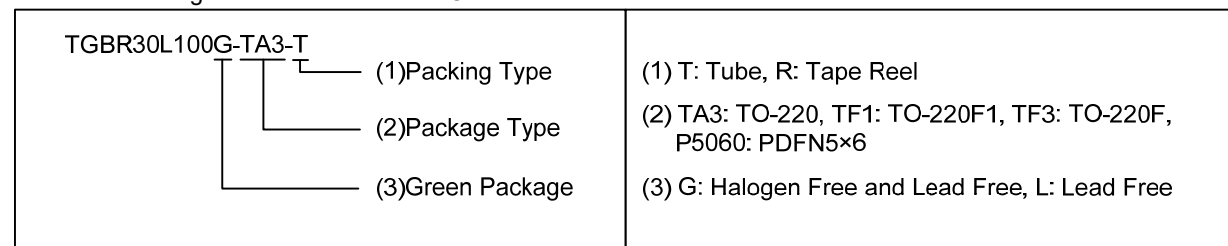
■ **SYMBOL**



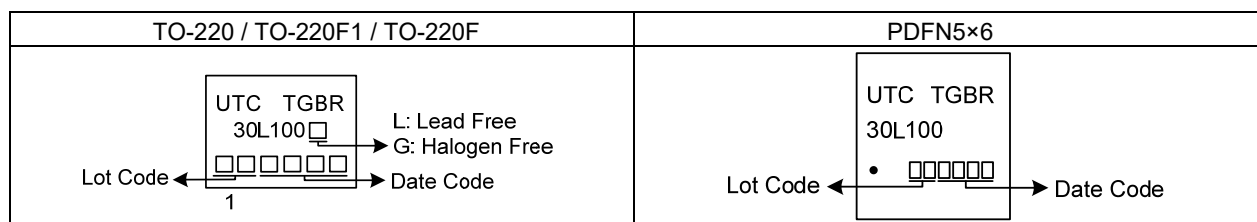
■ **ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment								Packing
Lead Free	Halogen Free		1	2	3	4	5	6	7	8	
TGBR30L100L-TA3-T	TGBR30L100G-TA3-T	TO-220	A	K	A	-	-	-	-	-	Tube
TGBR30L100L-TF1-T	TGBR30L100G-TF1-T	TO-220F1	A	K	A	-	-	-	-	-	Tube
TGBR30L100L-TF3-T	TGBR30L100G-TF3-T	TO-220F	A	K	A	-	-	-	-	-	Tube
TGBR30L100L-P5060-R	TGBR30L100G-P5060-R	PDFN5x6	A	A	A	NC	K	K	K	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode



■ **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 _{RPM}	100	V
Average Rectified Output Current	I _O	30	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	250	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)

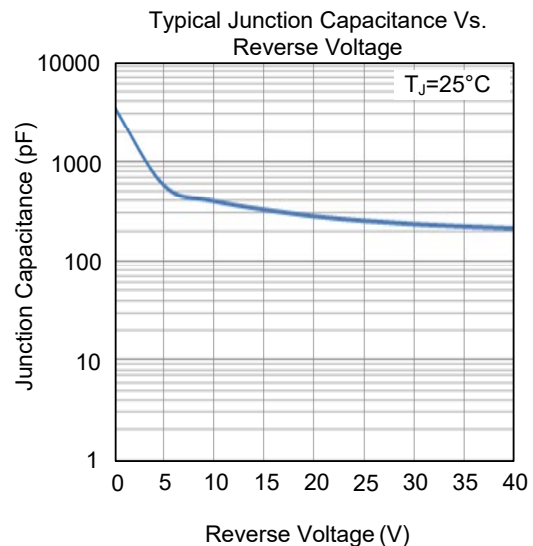
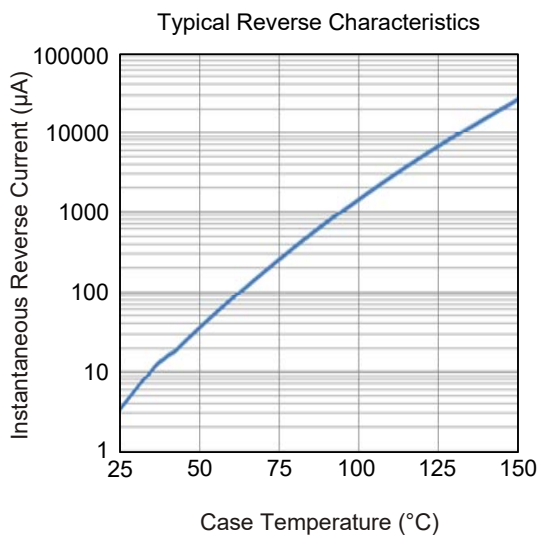
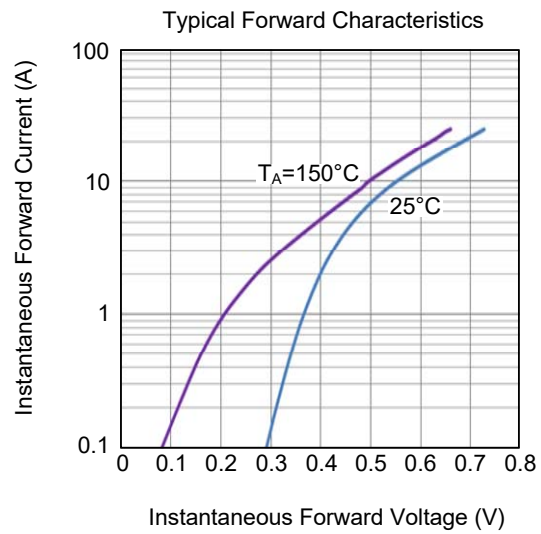
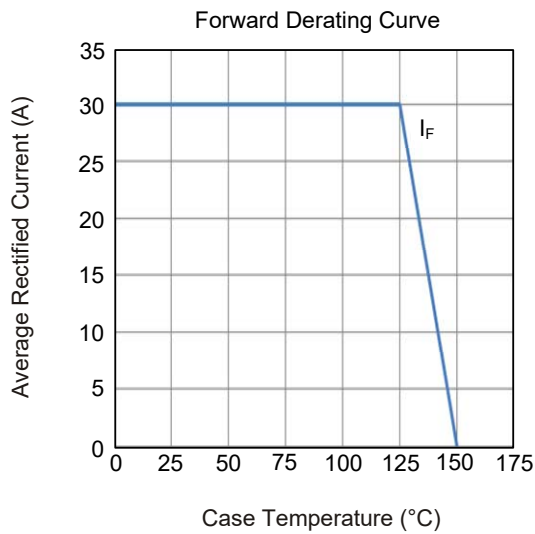
PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	TO-220	2	°C/W
	TO-220F	4	°C/W
	TO-220F1		
	PDFN5×6	2.5	°C/W

■ 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 =0.5mA	100			V
Forward Voltage Drop	V _{FM}	I _F =30A, T _J =25°C			0.9	V
		I _F =30A, T _J =125°C			0.8	V
Leakage Current	I _{RM}	V _R =100V, T _J =25°C			100	μA
		V _R =100V, T _J =125°C			35	mA

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

■ TYPICAL CHARACTERISTICS



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