



TGBR10S80

DIODE

TRENCH MOS SCHOTTKY BARRIER RECTIFIER

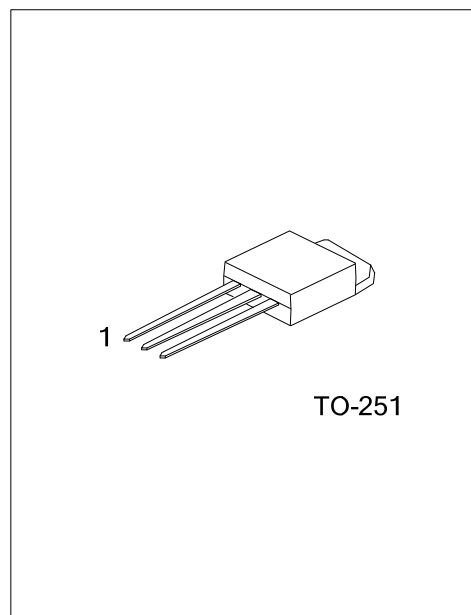
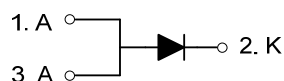
DESCRIPTION

The UTC **TGBR10S80** 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

- * Super low forward voltage drop
- * High current capability
- * High surge capability
- * High efficiency

SYMBOL



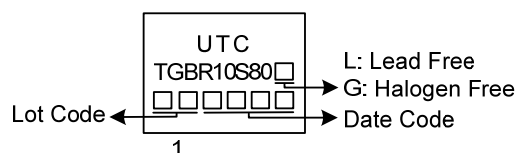
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TGBR10S80L-TM3-T	TGBR10S80G-TM3-T	TO-251	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>TGBR10S80G-TM3-T</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p>	<p>(1) T: Tube</p> <p>(2) TM3: TO-251</p> <p>(3) G: Halogen Free and Lead Free, L: 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 (Note 1)	V _{RM}	80	V
Working Peak Reverse Voltage	V _{RWM}	80	V
Peak Repetitive Reverse Voltage	V _{RRM}	80	V
Average Rectified Output Current	I _O	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)

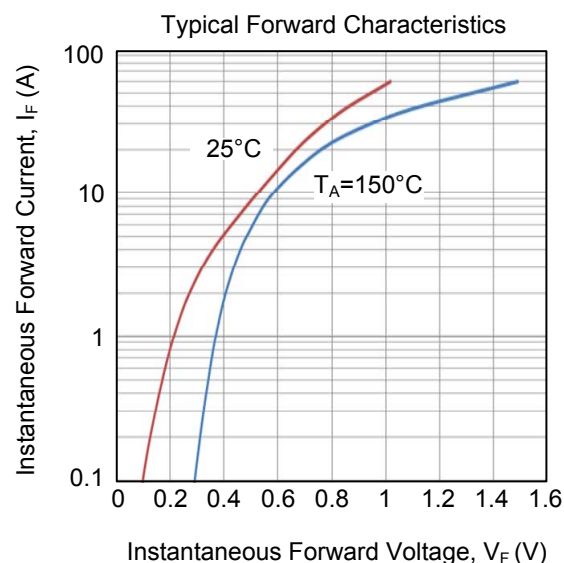
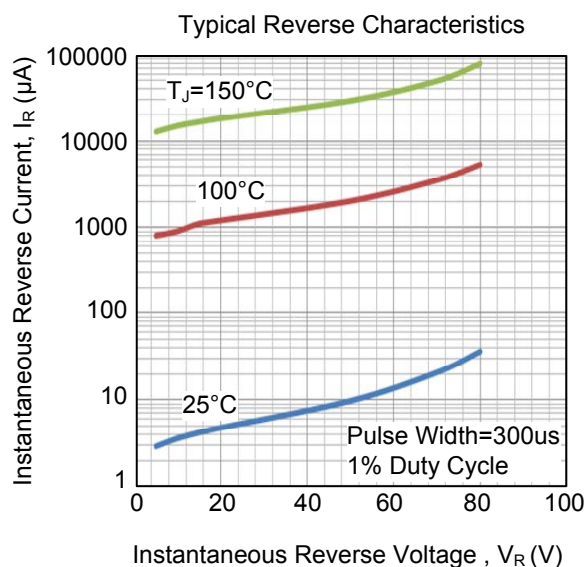
PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	θ _{JC}	6	°C/W

■ 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	80			V
Forward Voltage Drop	V _{FM}	I _F =10A, T _C =25°C			0.75	V
		I _F =10A, T _C =125°C			0.7	V
Leakage Current	I _{RM}	V _R =80V, T _C =25°C			150	μA
		V _R =80V, T _C =125°C			150	mA

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

■ TYPICAL CHARACTERISTICS



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