



TGBR20S45

DIODE

TRENCH MOS SCHOTTKY BARRIER RECTIFIER

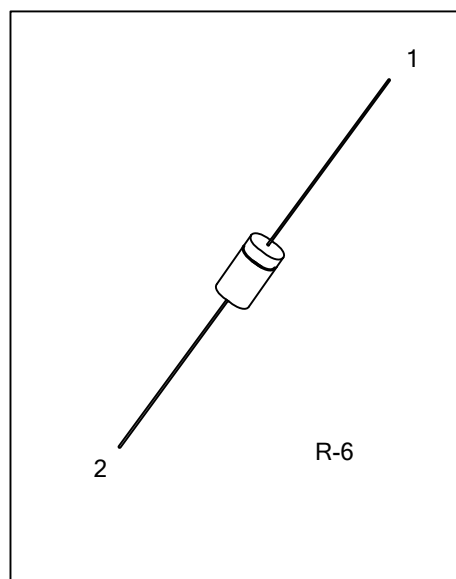
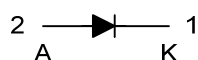
DESCRIPTION

The UTC **TGBR20S45** 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 switching speed

SYMBOL



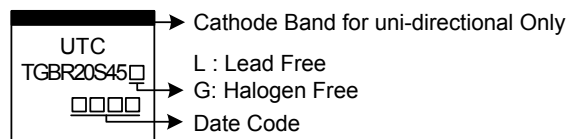
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
TGBR20S45L-R06-B	TGBR20S45G-R06-B	R-6	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>TGBR20S45G-R06-B</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) B: Tape Box (2) R06: R-6 (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	V _{RM}	45	V
Working Peak Reverse Voltage	V _{RWM}	45	V
Peak Repetitive Reverse Voltage	V _{RRM}	45	V
Average Rectified Output Current Per Device T _C =140°C	I _O	20	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	200	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)

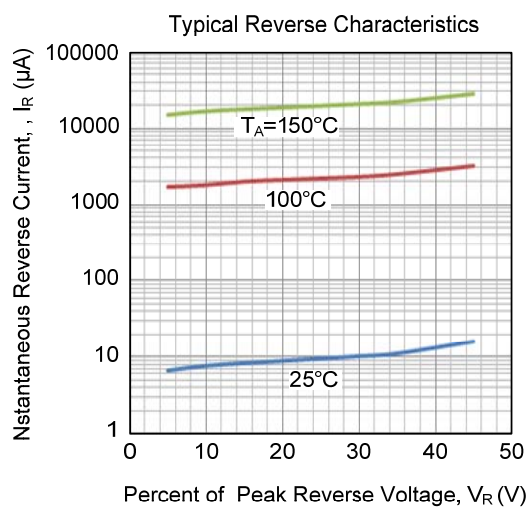
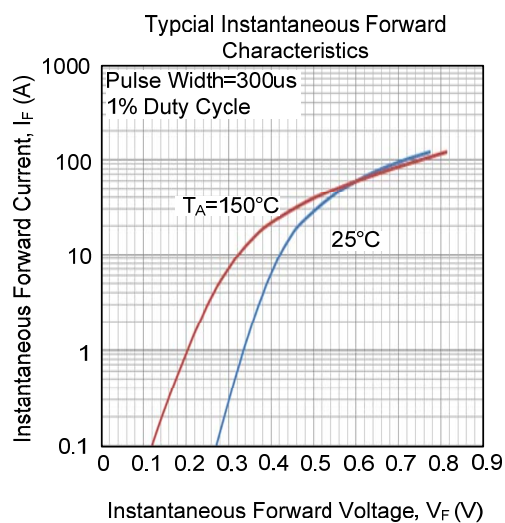
PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	θ _{JC}	10	°C/W

■ 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	45			V
Forward Voltage Drop	V _{FM}	I _F =20A, T _J =25°C			0.52	V
		I _F =20A, T _J =125°C			0.45	V
Leakage Current	I _{RM}	V _R =45V, T _J =25°C			300	μA
		V _R =45V, T _J =125°C			40	mA

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

■ TYPICAL CHARACTERISTICS



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