



## TGBR40S45

Advance

DIODE

### TRENCH MOS SCHOTTKY BARRIER RECTIFIER

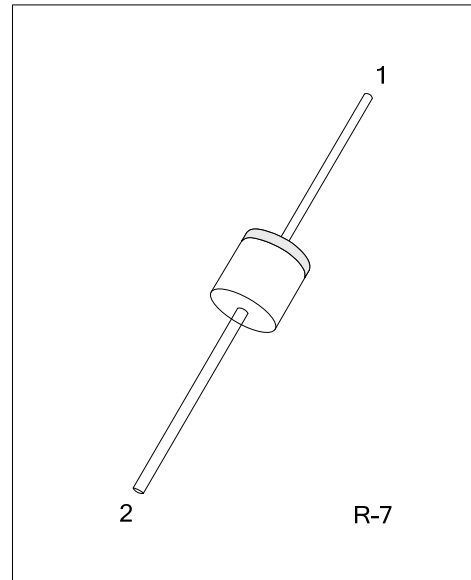
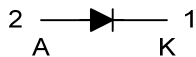
#### DESCRIPTION

The UTC **TGBR40S45** 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



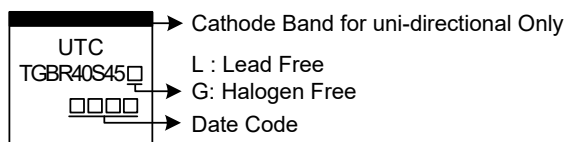
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
TGBR40S45L-R07-B	TGBR40S45G-R07-B	R-7	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>TGBR40S45G-R07-B</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Green Package</li> </ul>	<ul style="list-style-type: none"> <li>(1) B: Tape Box</li> <li>(2) R07: R-7</li> <li>(3) G: Halogen Free and Lead Free, L: Lead Free</li> </ul>
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#### MARKING



■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=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 <sub>RM</sub>	45	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	45	V
Peak Repetitive Reverse Voltage	V <sub>RPM</sub>	45	V
Average Rectified Output Current Per Device	I <sub>O</sub>	40	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	450	A
Operating Junction Temperature	T <sub>J</sub>	-65 ~ +150	°C
Storage Temperature	T <sub>STG</sub>	-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 <sub>JC</sub>	2.0	°C/W

■ ELECTRICAL CHARACTERISTICS (PER LEG) (T<sub>A</sub>=25°C unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =0.50mA	45			V
Forward Voltage Drop	V <sub>FM</sub>	I <sub>F</sub> =40A, T <sub>J</sub> =25°C			0.55	V
Leakage Current	I <sub>RM</sub>	V <sub>R</sub> =45V, T <sub>J</sub> =25°C			500	μA
		V <sub>R</sub> =45V, T <sub>J</sub> =100°C			50	mA

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

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