



TGBR60L100C

Preliminary

DIODE

DUAL TRENCH MOS SCHOTTKY BARRIER RECTIFIER

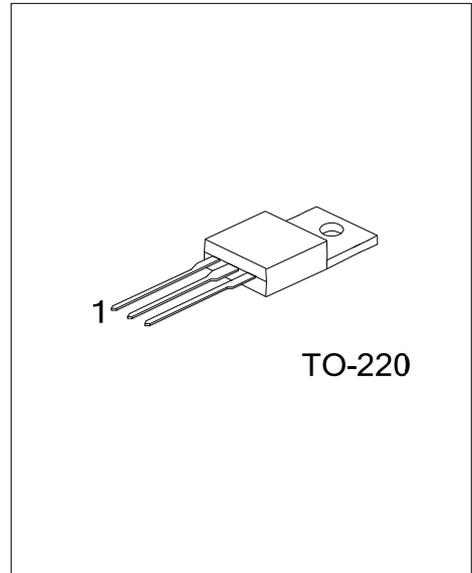
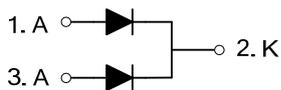
DESCRIPTION

The UTC **TGBR60L100C** is a dual 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



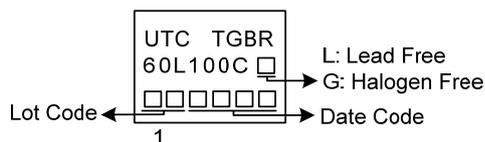
ORDERING INFORMATION

| Ordering Number | | Package | Pin Assignment | | | Packing |
|--------------------|--------------------|---------|----------------|---|---|---------|
| Lead Free | Halogen Free | | 1 | 2 | 3 | |
| TGBR60L100CL-TA3-T | TGBR60L100CG-TA3-T | TO-220 | A | K | A | Tube |

Note: Pin Assignment: A: Anode K: Cathode

| TGBR60L100CG-TA3-T | |
|--------------------|---|
| (1) Packing Type | (1) T: Tube |
| (2) Package Type | (2) TA3: TO-220 |
| (3) Green Package | (3) G: Halogen Free and Lead Free, L: Lead Free |

MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, 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 ($T_C=140^\circ\text{C}$) | Per Leg | I_o | 30 | A |
| | Total | | 60 | 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 | $^\circ\text{C}$ |
| Storage Temperature | | T_{STG} | -65 ~ +150 | $^\circ\text{C}$ |

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} | 2 | $^\circ\text{C/W}$ |

■ ELECTRICAL CHARACTERISTICS (PER LEG) ($T_A=25^\circ\text{C}$, unless otherwise specified.)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|---------------------------|-------------|--|-----|-----|------|---------------|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | $I_R=0.5\text{mA}$ | 100 | | | V |
| Forward Voltage Drop | V_{FM} | $I_F=30\text{A}, T_J=25^\circ\text{C}$ | | | 0.75 | V |
| | | $I_F=30\text{A}, T_J=125^\circ\text{C}$ | | | 0.7 | V |
| Leakage Current | I_{RM} | $V_R=100\text{V}, T_J=25^\circ\text{C}$ | | | 100 | μA |
| | | $V_R=100\text{V}, T_J=125^\circ\text{C}$ | | | 10 | mA |

Note: Pulse Test: Pulse width $\leq 300\mu\text{s}$, Duty cycle $\leq 2\%$.

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