



MGBR5L150

Preliminary

DIODE

MOS GATED BARRIER RECTIFIER

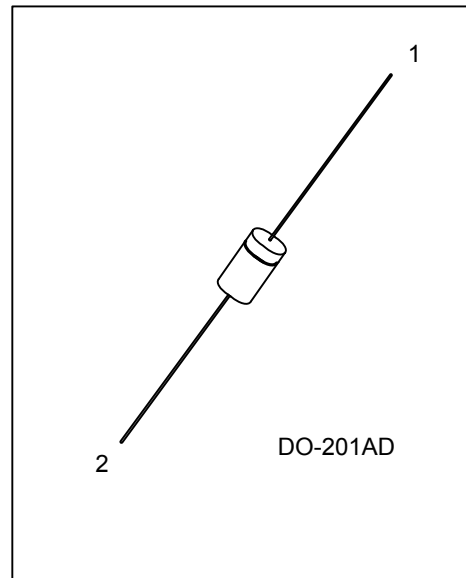
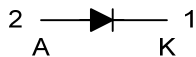
DESCRIPTION

The UTC **MGBR5L150** is a surface mount mos gated 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



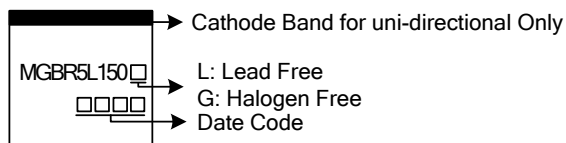
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
MGBR5L150L-Z21D-R	MGBR5L150G-Z21D-R	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>MGBR5L150G-Z21D-B</p>	<p>(1) B: Tape Box</p> <p>(2) Z21D: DO-201AD</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	V _{RM}	150	V
Working Peak Reverse Voltage	V _{RWM}	150	V
Repetitive Peak Reverse Voltage	V _{RPM}	150	V
RMS Reverse Voltage	V _{R(RMS)}	105	V
Average Rectified Output Current	I _O	5	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 DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ _{JA}	50	°C/W
Junction to Case	θ _{JC}	12	°C/W

■ ELECTRICAL CHARACTERISTICS(T_A=25°C, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	V _{(BR)R}	I _R =0.5mA	150			V
Forward Voltage Drop	V _{FM}	I _F =5A, T _J =25°C			0.86	V
		I _F =5A, T _J =125°C			0.73	V
Leakage Current (Note 1)	I _{RM}	V _R =150V, T _J =25°C			100	μA
		V _R =150V, T _J =125°C			20	mA

Notes: 1. Short duration pulse test used to minimize self-heating effect.

2. Thermal resistance junction to case mounted on heatsink.

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