



MBR5150

Preliminary

DIODE

SCHOTTKY BARRIER RECTIFIER

■ DESCRIPTION

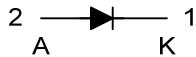
The UTC **MBR5150** is a schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, high current capability and high efficiency, etc.

The UTC **MBR5150** is suitable for free wheeling, high frequency inverters, low voltage and polarity protection applications.

■ FEATURES

- * Low forward voltage drop
- * High efficiency
- * Low power loss
- * High surge capability

■ SYMBOL



■ ORDERING INFORMATION

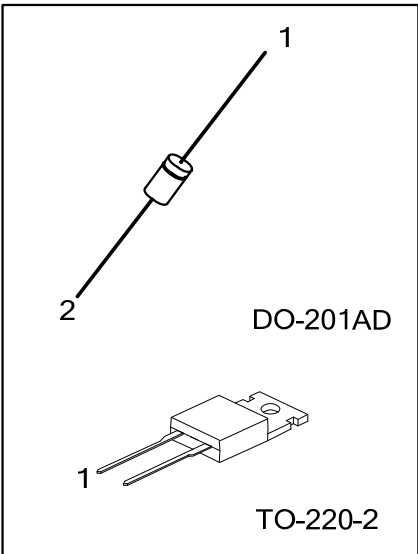
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
MBR5150L-TA2-T	MBR5150G-TA2-T	TO-220-2	K	A	Tube
MBR5150L-Z21D-B	MBR5150G-Z21D-B	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Common Cathode

<p>MBR5150L-TA2-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) T: Tube, B: Tape Box (2) TA2: TO-220-2, Z21D: DO-201AD (3) L: Lead Free, G: Halogen Free and Lead Free
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■ MARKING INFORMATION

TO-220-2	DO-201AD



■ ABSOLUTE MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_{DC}	150	V
RMS Voltage	V_{RMS}	105	V
Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Average Rectified Output Current	$I_{F(AV)}$	5.0	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 (Note 2)	θ_{JA}	50	°C/W
Junction to Case (Note 1)	θ_{JC}	12	°C/W

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop (Note 3)	V_F	$I_F=5.0A$ $T_J=25^\circ C$			0.9	V
		$I_F=5.0A$, $T_J=100^\circ C$			0.7	V
Peak Reverse Current at Rated DC Blocking Voltage	I_R	$T_J=25^\circ C$			50	μA
		$T_J=100^\circ C$			10	mA

Notes: 1. Measured at ambient temperature at a distance of 9.5mm from the case
2. Minimum Pad Area
3. Pulse test: 300 μs pulse width, 1% duty cycle

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