



MBR3200

DIODE

3.0A SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

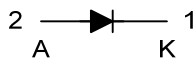
The UTC **MBR3200** is a schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, high current capability and high efficiency, etc.

The UTC **MBR3200** 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

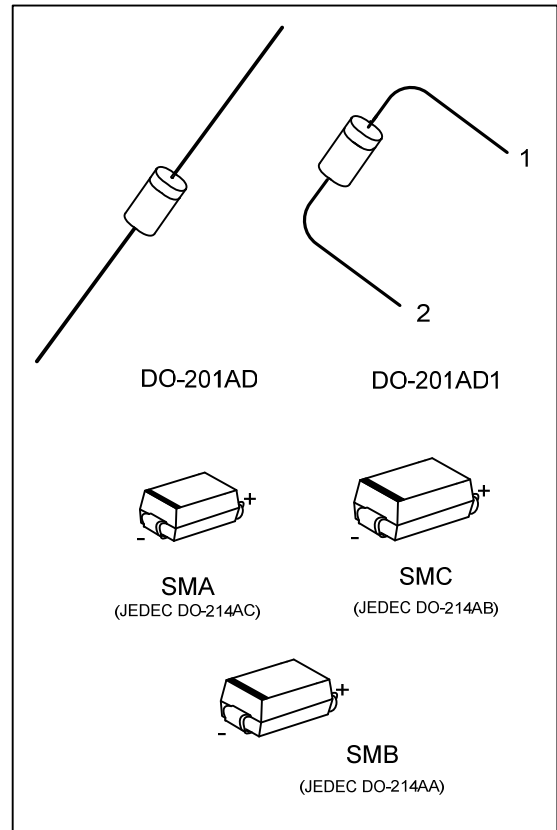
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
MBR3200L-SMA-R	MBR3200G-SMA-R	SMA	K	A	Tape Reel
MBR3200L-SMB-R	MBR3200G-SMB-R	SMB	K	A	Tape Reel
MBR3200L-SMC-R	MBR3200G-SMC-R	SMC	K	A	Tape Reel
MBR3200L-Z21D-B	MBR3200G-Z21D-B	DO-201AD	K	A	Tape Box
MBR3200L-Z21D1-B	MBR3200G-Z21D1-B	DO-201AD1	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR3200G-SMA-R</p>	<p>(1) R: Tape Reel, B: Tape Box (2) SMA: SMA, SMB: SMB, SMC: SMC, Z21D: DO-201AD, Z21D1: DO-201AD1 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING

SMA / SMB / SMC	DO-201AD / DO-201AD1



■ 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_{RM}	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	V
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Average Rectified Output Current	I_O	3.0	A
Non-Repetitive Peak Forward Surge Current: 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	80	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 (Note 1, 3)

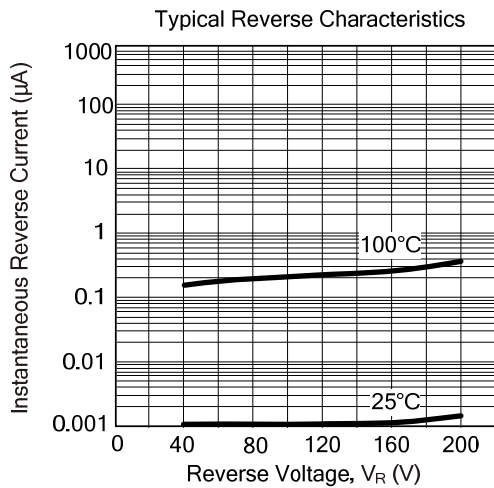
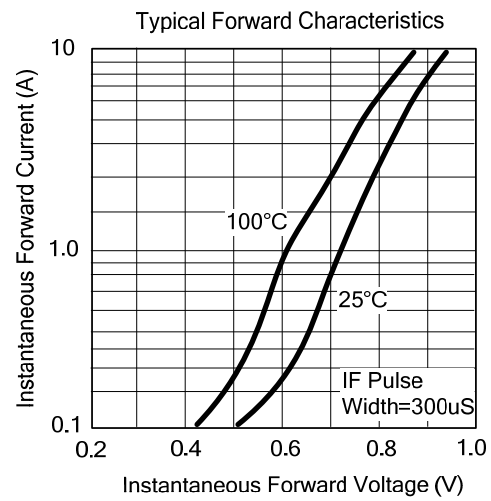
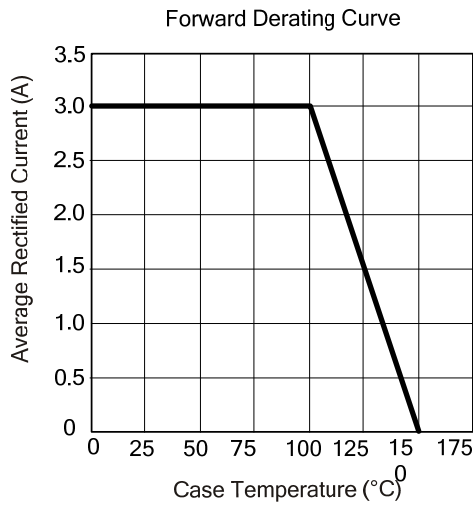
PARAMETER	SYMBOL	RATINGS	UNIT	
Typical Thermal Resistance	DO-201AD DO-201AD1	θ_{JA}	50	°C/W
	SMA/SMB SMC		70	°C/W
	DO-201AD DO-201AD1	θ_{JC}	12	°C/W
	SMA	θ_{JL}	24	°C/W
	SMB		22	°C/W
	SMC		12	°C/W

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop (Note 2)	V_F	$I_F=3.0A$ $T_J=25^\circ C$			0.9	V
		$I_F=3.0A$, $T_J=100^\circ C$			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. Minimum Pad Area.
2. Pulse test: 300 μs pulse width, 1% duty cycle.
3. FR-4 PCB, 2 oz Copper. Minimum recommended pad layout

■ TYPICAL CHARACTERISTICS



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