



MBR340

Preliminary

DIODE

3.0A, 40V SCHOTTKY BARRIER RECTIFIER

■ DESCRIPTION

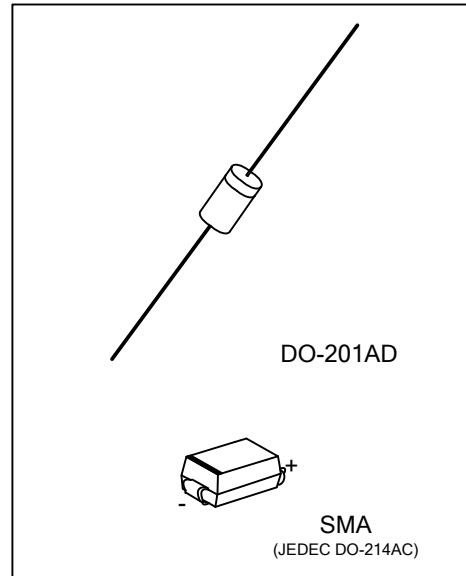
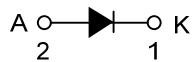
The UTC **MBR340** is a 3.0A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with high surge capability, high efficiency, high current capability, low power loss and low forward voltage drop, etc.

The UTC **MBR340** is suitable for free wheeling and polarity protection, etc.

■ FEATURES

- * Low Reverse Current
- * Low Stored Charge, Majority Carrier Conduction
- * Low Power Loss/High Efficiency
- * Highly Stable Oxide Passivated Junction

■ SYMBOL



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
MBR340L-Z21D-B	MBR340G-Z21D-B	DO-201AD	K	A	Tape Box
MBR340L-SMA-R	MBR340G-SMA-R	SMA	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR340L-Z21D-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) R: Tape Reel, B: Tape Box (2) Z21D: DO-201AD, SMA: SMA (3) L: Lead Free, G: Halogen Free and Lead Free
---	--

■ MARKING

DO-201AD	SMA
<p>→ Cathode Band for uni-directional Only</p> <p>MBR340□</p> <p>□□□□</p> <ul style="list-style-type: none"> L: Lead Free G: Halogen Free Date Code 	<p>→ Date Code</p> <p>UTC □□□</p> <p>MBR340□</p> <p>← Cathode Band for uni-directional Only</p> <ul style="list-style-type: none"> L: Lead Free G: Halogen Free

■ ABSOLUTE MAXIMUM RATING ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}	40	V
DC Blocking Voltage	V_R	40	V
Maximum RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Forward Current (Rated V_R -20Khz Square Wave) - 50% Duty Cycle	I_O	3.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	I_{FSM}	80	A
Typical Junction Capacitance (Note 2)	C_J	650	pF
Junction Temperature	T_J	-65~+150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65~+150	$^{\circ}\text{C}$

Notes: 1. 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.

2. Applied $V_R = 4.0\text{V}$ and $f = 1.0\text{MHz}$.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	SMA	90	$^{\circ}\text{C/W}$
	DO-201AD	50	

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage Drop	V_F	$I_F=3.0\text{A}$, $T_C=25^{\circ}\text{C}$			0.60	V
		$I_F=3.0\text{A}$, $T_C=125^{\circ}\text{C}$			0.55	V
Instantaneous Reverse Current	I_R	Rated DC Voltage, $T_C=25^{\circ}\text{C}$			100	μA
		Rated DC Voltage, $T_C=125^{\circ}\text{C}$			20	mA

Note: Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2.0\%$.

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.