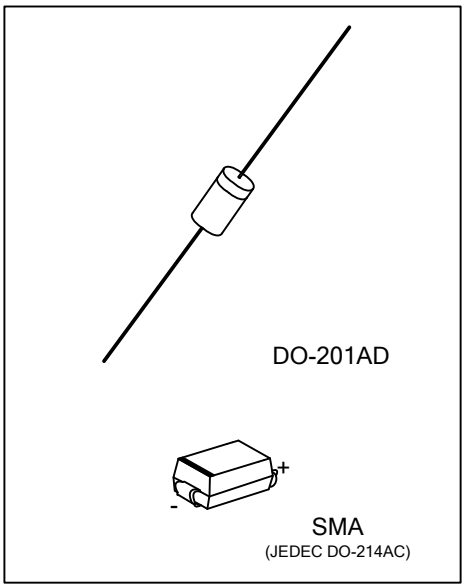
3.0A, 40V SCHOTTKY BARRIER RECTIFIER



■ DESCRIPTION

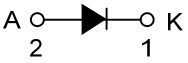
The UTC **MBR340** is a 3.0A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with high surge capability, high efficiency, high current capability, low power loss and low forward voltage drop, etc.

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

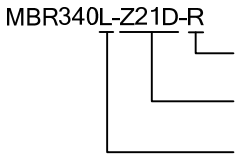
■ SYMBOL



■ 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

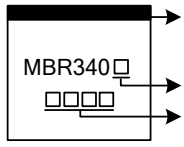
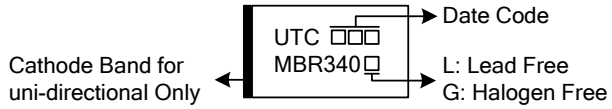


(1) R: Tape Reel, B: Tape Box

(2) Z21D: DO-201AD, SMA: SMA

(3) L: Lead Free, G: Halogen Free and Lead Free

■ MARKING

DO-201AD	SMA
	

■ ABSOLUTE MAXIMUM RATING (T_A=25°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	°C
Storage Temperature	T_{STG}	-65~+150	°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 = 4.0V and f = 1.0MHz.

■ THERMAL DATA

PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Ambient	SMA	θ_{JA}	90	°C/W
	DO-201AD		50	

■ ELECTRICAL CHARACTERISTICS

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

Note: Pulse Test: Pulse Width ≤ 300μs, Duty Cycle ≤ 2.0%.