



## UMUR1660

DIODE

### SWITCHMODE POWER RECTIFIERS

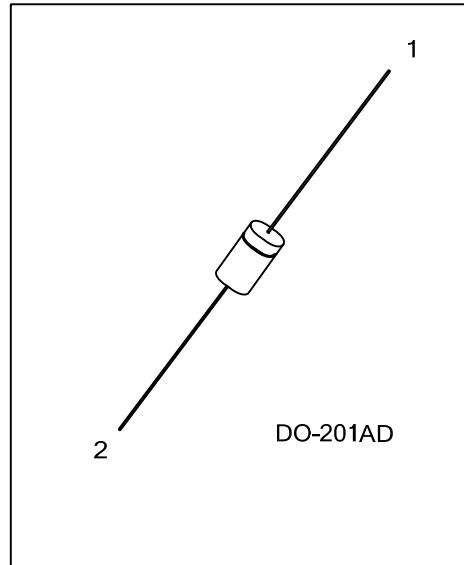
#### DESCRIPTION

The UTC **UMUR1660** is a switchmode power rectifiers, it uses UTC's advanced technology to provide customers with low forward drop and low leakage current, etc.

The UTC **UMUR1660** is suitable for inverters and switching power supplies, etc.

#### FEATURES

- \* Low forward drop voltage
- \* High voltage capability
- \* Low leakage current



#### SYMBOL



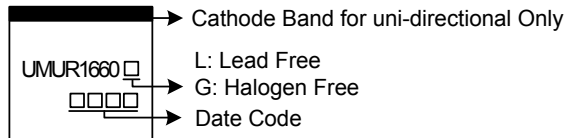
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
UMUR1660L-Z21D-B	UMUR1660G-Z21D-B	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>UMUR1660G-Z21D-B</p> <ul style="list-style-type: none"> <li>(1)Packing Type</li> <li>(2)Package Type</li> <li>(3)Green Package</li> </ul>	<ul style="list-style-type: none"> <li>(1) B: Tape Box</li> <li>(2) Z21D: DO-201AD</li> <li>(3) G: Halogen Free and Lead Free, L: Lead Free</li> </ul>
--	--

#### MARKING



### ■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	$V_R$	600	V
Working Peak Reverse Voltage	$V_{RWM}$	600	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	600	V
Average Rectified Forward Current Total Device, (Rated $V_R$ ), $T_C=150^{\circ}C$	$I_{F(AV)}$	16	A
Peak Rectified Forward Current (Rated $V_R$ , Square Wave, 20kHz), $T_C=150^{\circ}C$	$I_{FM}$	16	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60Hz)	$I_{FSM}$	110	A
Operating Junction Temperature	$T_J$	-65 ~ +175	$^{\circ}C$
Storage Temperature	$T_{STG}$	-65 ~ +175	$^{\circ}C$

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 CHARACTERISTICS (PER LEG)

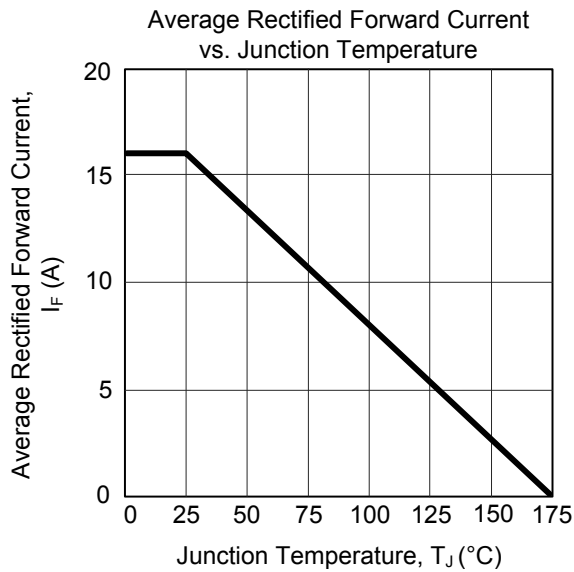
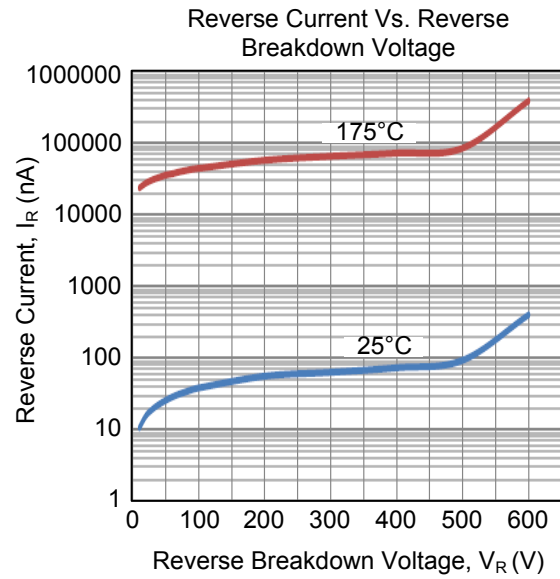
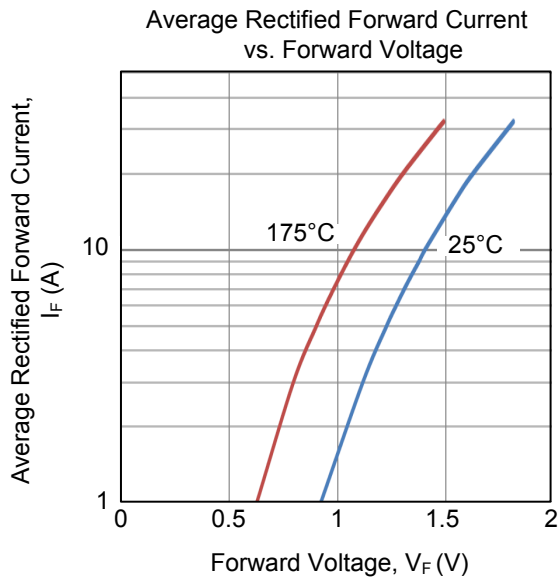
PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	$\theta_{JC}$	2	$^{\circ}C/W$

### ■ ELECTRICAL CHARACTERISTICS (PER DIODE LEG)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage (Note)	$V_F$	$I_F=16A, T_C=25^{\circ}C$			1.5	V
		$I_F=16A, T_C=150^{\circ}C$			1.1	V
Instantaneous Reverse Current (Note)	$I_R$	Rated dc Voltage, $T_C=25^{\circ}C$			10	$\mu A$
		Rated dc Voltage, $T_C=150^{\circ}C$			500	$\mu A$
Reverse Recovery Time	$t_{rr}$	$I_F=1A, V_R=400V, di/dt=50A/\mu s$		64		ns
		$I_F=16A, V_R=400V, di/dt=50A/\mu s$		89		ns

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

## ■ TYPICAL CHARACTERISTICS



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. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.