



## UMUR860

Advance

DIODE

### SWITCHMODE POWER RECTIFIERS

#### DESCRIPTION

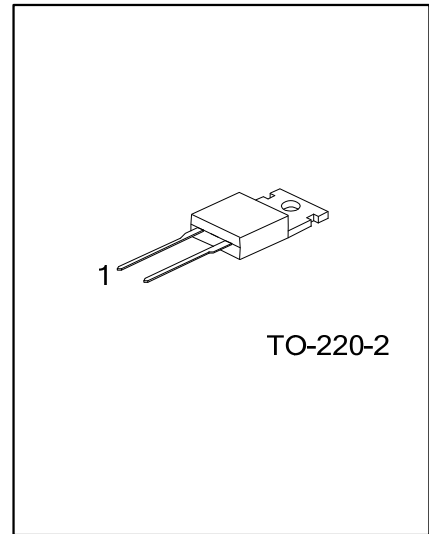
The UTC **UMUR860** is a switchmode power rectifiers, it uses UTC's advanced technology to provide customers with low forward voltage and low leakage current, etc.

The UTC **UMUR860** is suitable for free inverters and switching power supplies, etc.

#### FEATURES

- \* Low forward voltage
- \* Low leakage current

#### SYMBOL



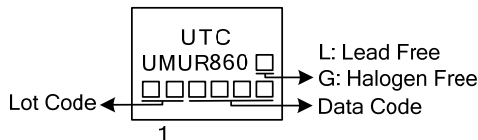
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UMUR860L-TA2-T	UMUR860G-TA2-T	TO-220-2	K	A	NC	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>UMUR820L-TA2-T</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) T: Tube</li> <li>(2) TA2: TO-220-2</li> <li>(3) L: Lead Free, G: Halogen Free and Lead Free</li> </ul>
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#### 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 Per Total Device, (Rated $V_R$ ), $T_C=150^{\circ}\text{C}$	$I_{F(AV)}$	8.0	A
Peak Repetitive Forward Current (Rated $V_R$ , Square Wave, 20kHz), $T_C=150^{\circ}\text{C}$	$I_{FM}$	16	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60Hz)	$I_{FSM}$	100	A
Operating Junction Temperature	$T_J$	-65~+175	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-65~+175	$^{\circ}\text{C}$

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

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	$\theta_{JA}$	73	$^{\circ}\text{C/W}$
Junction to Case	$\theta_{JC}$	3.0	$^{\circ}\text{C/W}$

### ■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage (Note)	$V_{FM}$	$I_F=8.0\text{A}$ , $T_C=25^{\circ}\text{C}$			1.50	V
		$I_F=8.0\text{A}$ , $T_C=150^{\circ}\text{C}$			1.20	V
Instantaneous Reverse Current (Note)	$I_{RM}$	Rated DC Voltage, $T_J=25^{\circ}\text{C}$			5.0	$\mu\text{A}$
		Rated DC Voltage, $T_J=150^{\circ}\text{C}$			250	$\mu\text{A}$
Reverse Recovery Time	$t_{RR}$	$I_F=1.0\text{A}$ , $di/dt=50\text{A}/\mu\text{s}$			60	ns

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

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