

### UMUR860

## 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.

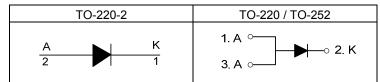
The UTC **UMUR860** is suitable for free inverters and switching power supplies, etc.

#### FEATURES

\* Low forward voltage

\* Low leakage current

#### SYMBOL

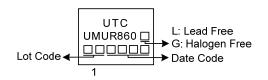


#### ORDERING INFORMATION

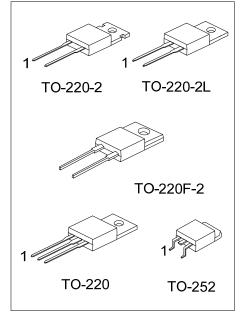
Ordering Number		Package	Pin Assignment			Packing	
Lead Free	Halogen Free	1 acraye		2	3	Facking	
UMUR860L-TA2-T	UMUR860G-TA2-T	TO-220-2	К	Α	NC	Tube	
UMUR860L-TA2L-T	UMUR860G-TA2L-T	IG-TA2L-T TO-220-2L K A		Α	NC	Tube	
UMUR860L-TA3-T	UMUR860G-TA3-T	TO-220	Α	K	Α	Tube	
UMUR860L-TF32-R	UMUR860G-TF32-R	TO-220F-2	К	Α	NC	Tube	
UMUR860L-TN3-R	UMUR860L-TN3-R UMUR860G-TN3-R		Α	К	А	Tape Reel	
Note: Pin Assignment: A: Anode K: Cathode							

UMUR860G-TA2-T (1)Packing Type (2)Package Type (3)Green Package	<ul> <li>(1) T: Tube, R: Tape Reel</li> <li>(2) TA2: TO-220-2, TA2L: TO-220-2L, TA3: TO-220, TF32: TO-220F-2, TN3: TO-252</li> <li>(3) G: Halogen Free and Lead Free, L: Lead Free</li> </ul>
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#### MARKING



### DIODE



#### ■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V <sub>R</sub>	600	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	600	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	600	V
Average Rectified Forward Current Per Total Device, (Rated $V_R$ ), T <sub>C</sub> =150°C	I <sub>F(AV)</sub>	8	А
Peak Repetitive Forward Current (Rated $V_R$ , Square Wave, 20kHz), T <sub>C</sub> =150°C	I <sub>FM</sub>	16	А
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60Hz)	I <sub>FSM</sub>	100	A
Operating Junction Temperature	TJ	-65 ~ +175	°C
Storage Temperature	T <sub>STG</sub>	-65 ~ +175	°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	TO-220-2 TO-220-2L TO-220 TO-220F2	θ <sub>JA</sub>	73	°C/W	
	TO-252		110	°C/W	
Junction to Case	TO-220-2 TO-220-2L TO-220 TO-220F2	θις	3	°C/W	
	TO-252		6	°C/W	

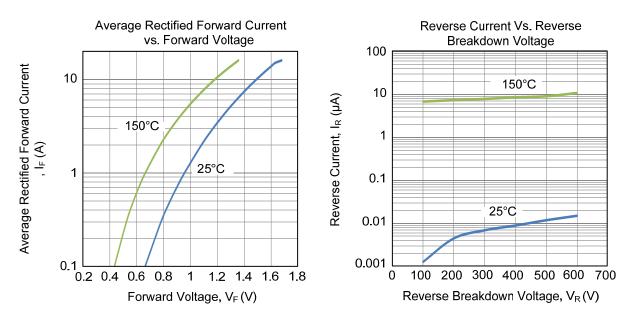
#### ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage (Note)	VEM	I <sub>F</sub> =8A, T <sub>C</sub> =25°C			1.50	V
		I <sub>F</sub> =8A, T <sub>C</sub> =150°C			1.20	V
	DM	Rated DC Voltage, TJ=25°C			5.0	μA
Instantaneous Reverse Current (Note)		Rated DC Voltage, TJ=150°C			250	μA
Reverse Recovery Time	t <sub>RR</sub>	I <sub>F</sub> =1A, di/dt=50A/µs			60	ns

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



# **UMUR860**



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