



SWITCHMODE ULTRAFAST POWER RECTIFIER

DESCRIPTION

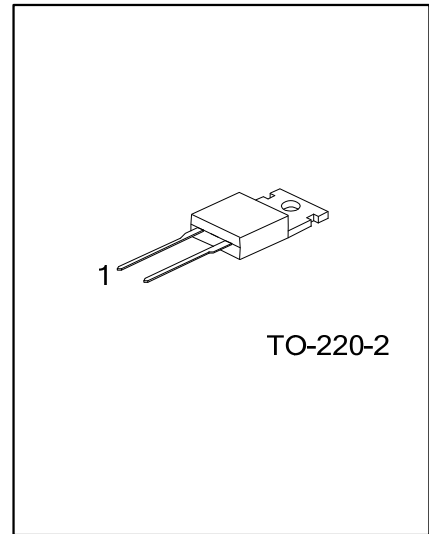
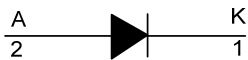
The UTC **UMUR2020** is a switchmode ultrafast power rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high surge capacity, etc.

The UTC **UMUR2020** is suitable for instrumentation and power management, etc

FEATURES

- * Low forward voltage drop
- * High efficiency
- * Low power loss
- * High surge capacity

SYMBOL



ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UMUR2020L-TA2-T	UMUR2020G-TA2-T	TO-220-2	K	A	NC	Tube

Note: Pin Assignment: A: Anode, K: Cathode

<p>UMUR2020L-TA2-T</p> <p>(1)Packing Type (2)Package Type (3)Halogen Free</p>	<p>(1) T: Tube (2) TA2: TO-220-2 (3) L: Lead Free, G: Halogen Free</p>
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■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_R	200	V
Working Peak Reverse Voltage	V_{RWM}	200	V
Peak Repetitive Reverse Voltage	V_{RRM}	200	V
Average Rectified Forward Voltage (Rated V_R), $T_C=125^\circ\text{C}$	$I_{F(AV)}$	20	A
Peak Repetitive Forward Current (Rated V_R), $T_C=125^\circ\text{C}$	I_{FRM}	40	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60Hz)	I_{FSM}	250	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 Case	θ_{JC}	2.0	$^\circ\text{C/W}$
Junction to Ambient	θ_{JA}	70	$^\circ\text{C/W}$

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage (Note 1)	V_F	$I_F=20\text{A}$, $T_J=25^\circ\text{C}$		0.97	1.1	V
		$I_F=20\text{A}$, $T_J=150^\circ\text{C}$		0.79	1.0	V
Instantaneous Reverse Current (Note 1)	I_R	Rated DC Voltage, $T_J=25^\circ\text{C}$		0.1	50	μA
		Rated DC Voltage, $T_J=150^\circ\text{C}$		0.225	1.0	mA
Reverse Recovery Time	t_{RR}	$I_F=1.0\text{A}$, $di/dt=50\text{A}/\mu\text{s}$			95	ns
		$I_F=1.0\text{A}$, $di/dt=100\text{A}/\mu\text{s}$			75	ns

Note: Pulse Test: Pulse Width=5.0ms, Duty Cycle \leq 10%

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