



UMUR840

Preliminary

DIODE

SWITCHMODE POWER RECTIFIERS

DESCRIPTION

The UTC **UMUR840** 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 **UMUR840** is suitable for free inverters and switching power supplies, etc.

FEATURES

- * Low forward voltage
- * Low leakage current

SYMBOL



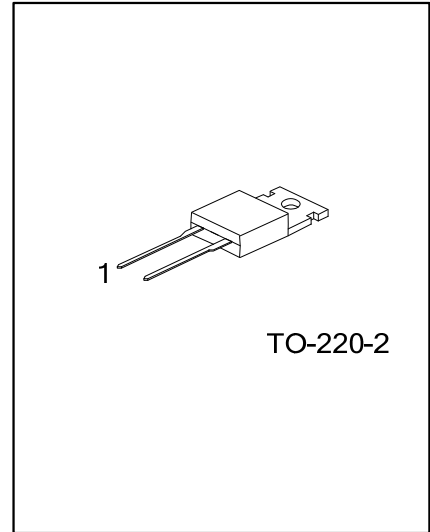
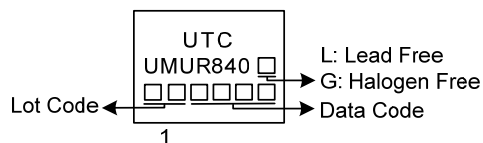
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
UMUR840L-TA2-T	UMUR840G-TA2-T	TO-220-2	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>UMUR840G-TA2-T</p> <p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) T: Tube (2) TA2: TO-220-2 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_R	400	V
Working Peak Reverse Voltage	V_{RWM}	400	V
Peak Repetitive Reverse Voltage	V_{RRM}	400	V
Average Rectified Forward Current Per Total Device, (Rated V_R), $T_C=150^{\circ}\text{C}$	$I_{F(AV)}$	8	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	θ_{JA}	73	$^{\circ}\text{C/W}$
Junction to Case	θ_{JC}	3	$^{\circ}\text{C/W}$

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage (Note)	V_{FM}	$I_F=8\text{A}$, $T_C=25^{\circ}\text{C}$			1.5	V
		$I_F=8\text{A}$, $T_C=150^{\circ}\text{C}$			1.2	V
Instantaneous Reverse Current (Note)	I_{RM}	Rated DC Voltage, $T_J=25^{\circ}\text{C}$			5.0	μA
		Rated DC Voltage, $T_J=150^{\circ}\text{C}$			250	μA
Reverse Recovery Time	t_{RR}	$I_F=1\text{A}$, $di/dt=50\text{A}/\mu\text{s}$			50	ns

Note: Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2.0\%$.

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