



UUR3030C

Preliminary

DIODE

SWITCHMODE ULTRAFAST POWER RECTIFIER

DESCRIPTION

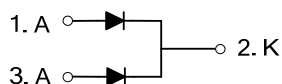
The UTC **UUR3030C** is a switchmode ultrafast power rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high surge capacity, etc.

The UTC **UUR3030C** is suitable for instrumentation and power management, etc

FEATURES

- * Ultra-fast switching
- * Low forward voltage drop
- * High efficiency and low power loss
- * High surge capacity

SYMBOL



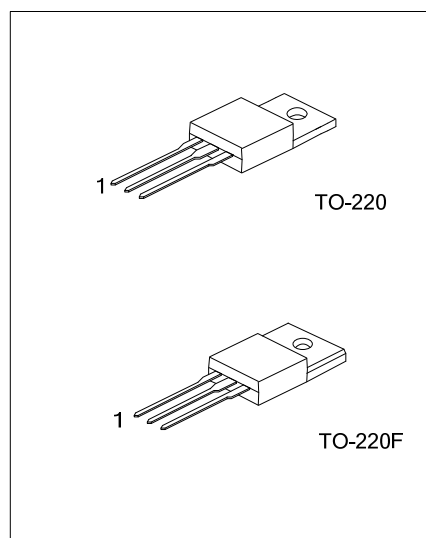
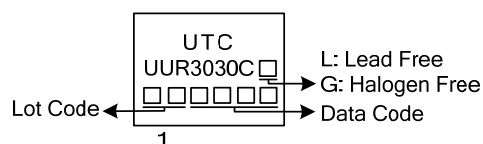
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UUR3030CL-TA3-T	UUR3030CG-TA3-T	TO-220	A	K	A	Tube
UUR3030CL-TF3-T	UUR3030CG-TF3-T	TO-220F	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

UUR3030CL-TA3-T	(1)Packing Type	(1) T: Tube
	(2)Package Type	(2) TA3: TO-220, TF3: TO-220F
	(3)Green Package	(3) L: Lead Free, G: Halogen Free and Lead Free

MARKING



■ ABSOLUTE MAXIMUM RATINGS (PER LEG)

PARAMETER		SYMBOL	RATINGS	UNIT
Peak Repetitive Reverse Voltage		V_{RRM}	300	V
Working Peak Reverse Voltage		V_{RWM}	300	V
DC Blocking Voltage		V_R	300	V
Average Forward Current (50% Duty Cycle @ $T_C=95^{\circ}\text{C}$, Rectangular Wave Form)	Per Leg	$I_{F(AV)}$	15	A
	Total		30	A
Peak One Cycle Non-Repetitive Surge Current (8.3ms, Half Sine Pulse)		I_{FSM}	125	A
Junction Temperature		T_J	-55 ~ +150	$^{\circ}\text{C}$
Storage Temperature		T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

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 (PER LEG)

PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Case (DC Operation)	TO-220	θ_{JC}	2.0	$^{\circ}\text{C/W}$
	TO-220F		3.4	

■ ELECTRICAL CHARACTERISTICS (PER LEG)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop	V_{F1}	$I_F=15\text{A}$, $T_J=25^{\circ}\text{C}$			1.5	V
	V_{F2}	$I_F=15\text{A}$, $T_J=125^{\circ}\text{C}$			1.4	V
Reverse Current	I_{R1}	$V_R=\text{Rated } V_R$, $T_J=25^{\circ}\text{C}$			10	μA
	I_{R2}	$V_R=\text{Rated } V_R$, $T_J=125^{\circ}\text{C}$			500	μA
Reverse Recovery Time	t_{rr}	$I_F=500\text{mA}$, $I_R=1\text{A}$, $I_{RM}=250\text{mA}$			35	ns

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

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