



## UUR3060C

DIODE

### SWITCHMODE ULTRAFAST POWER RECTIFIER

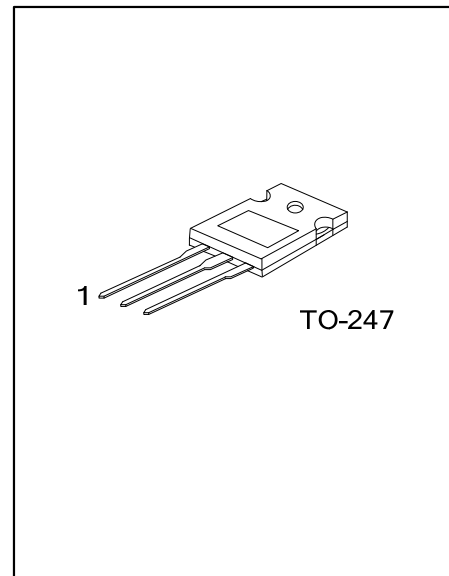
#### DESCRIPTION

The UTC **UUR3060C** 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.

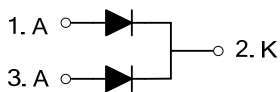
The UTC **UUR3060C** is suitable for instrumentation and power management, etc

#### FEATURES

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



#### SYMBOL

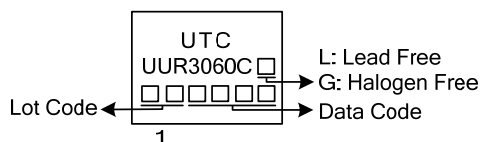


#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UUR3060CL-T47-T	UUR3060CG-T47-T	TO-247	A	K	A	Tube

<p>UUR3060CG-T47-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) T47: TO-247</li> <li>(3) G: Halogen Free and Lead Free, L: Lead Free</li> </ul>
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#### MARKING



## ■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT	
Repetitive Peak Reverse Voltage	$V_{RRM}$	600	V	
Working Peak Reverse Voltage	$V_{RWM}$	600	V	
DC Blocking Voltage	$V_R$	600	V	
Average Forward Current	$I_{F(AV)}$	$T_C=140^{\circ}C$	15	A
		Total Device	30	A
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions, halfwave, single phase, 60 Hz)	$I_{FSM}$	180	A	
Operating Junction Temperature	$T_J$	-65 ~ +150	$^{\circ}C$	
Storage Temperature	$T_{STG}$	-65 ~ +150	$^{\circ}C$	

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 RESISTANCE

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	$\theta_{JA}$	40	$^{\circ}C/W$
Junction to Case	$\theta_{JC}$	1.5	$^{\circ}C/W$

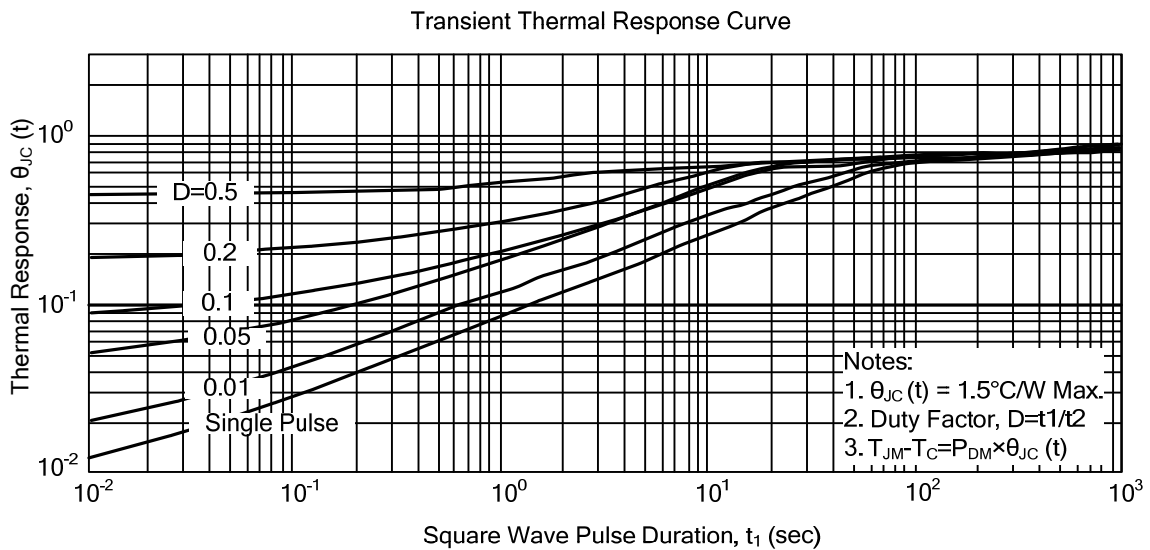
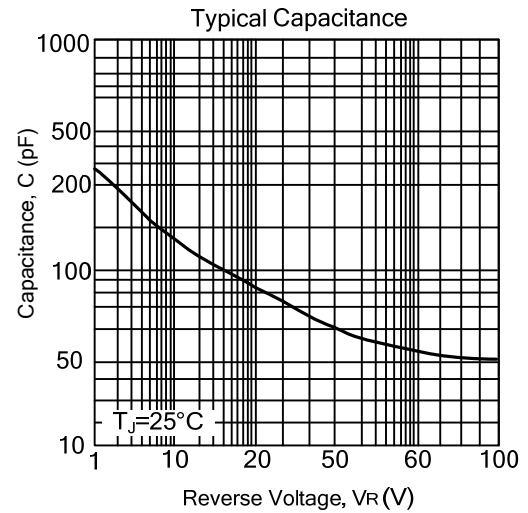
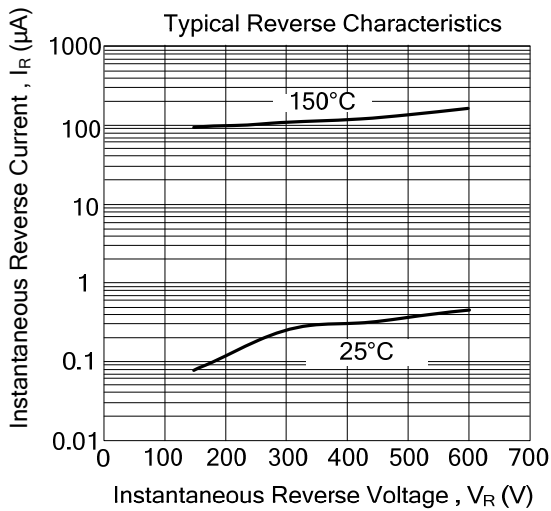
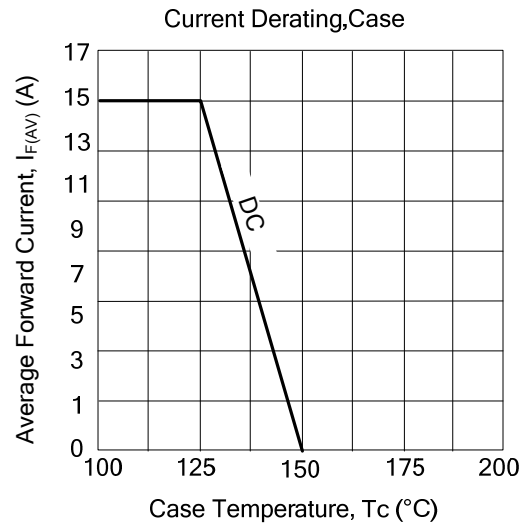
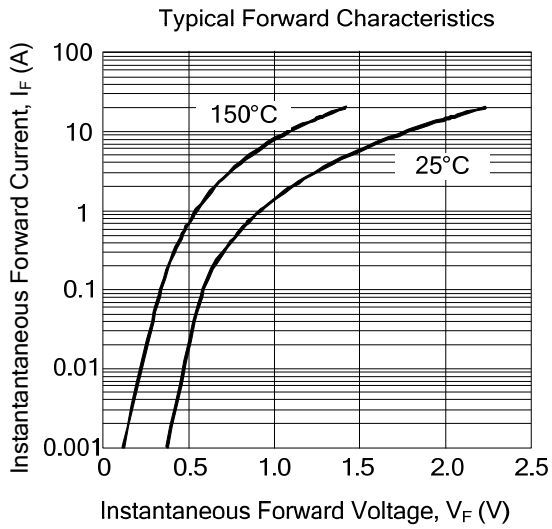
## ■ ELECTRICAL CHARACTERISTICS

Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	$I_R=1mA$	600			V
Forward Voltage Drop	$V_F$	$I_F=15A, T_J=25^{\circ}C$		2.1	2.9	V
		$I_F=15A, T_J=125^{\circ}C$			1.8	V
Leakage Current (Note 1)	$I_R$	Rated DC voltage, $T_J=125^{\circ}C$			800	$\mu A$
		Rated DC voltage, $T_J=25^{\circ}C$			60	$\mu A$
Maximum Reverse Recovery Time	$t_{rr}$	$I_F=1.0A, di/dt=50A/\mu s$		38	50	ns

Notes: 1. Short duration pulse test used to minimize self-heating effect.  
2. Thermal resistance junction to case mounted on heatsink.

## TYPICAL CHARACTERISTICS



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