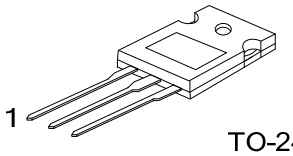
UUR3060

DIODE

SWITCHMODE ULTRAFAST POWER RECTIFIER



TO-247

■ DESCRIPTION

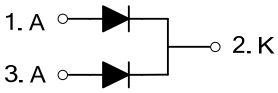
The UTC **UUR3060** is a switchmode ultrafast power rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high surge capacity, etc.

The UTC **UUR3060** 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

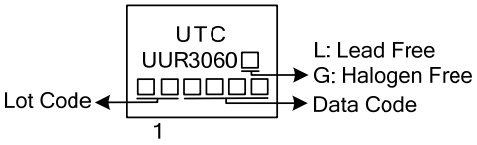


■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UUR3060L-T47-T	UUR3060G-T47-T	TO-247	A	K	A	Tube

UUR3060L-T47-T (1)Packing Type (2)Package Type (3)Green Package	(1) T: Tube (2) T47: TO-247 (3) L: Lead Free, G: Halogen Free and Lead Free

■ 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	T_C=140°C	$I_{F(AV)}$	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	°C
Storage Temperature		T_{STG}	-65~+150	°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	θ_{JA}	40	°C/W
Junction to Case	θ_{JC}	1.5	°C/W

■ ELECTRICAL CHARACTERISTICS

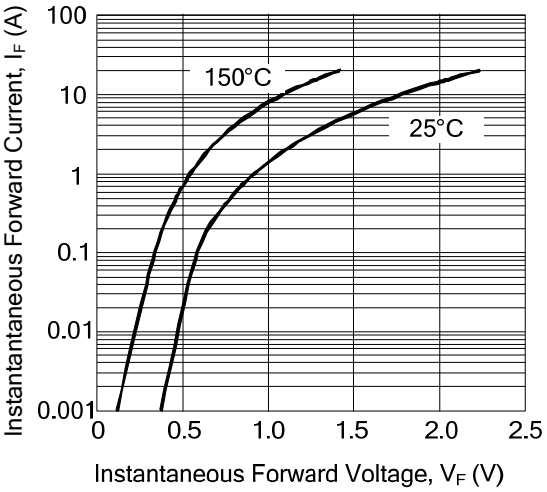
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitance load, derate current by 20%.

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°C		2.1	2.9	V
		I_F=15A, T_J=125°C			1.8	V
Leakage Current (Note 1)	I_R	Rated DC voltage, T_J=125°C			800	μA
		Rated DC voltage, T_J=25°C			60	μA
Maximum Reverse Recovery Time	t_{rr}	I_F=1.0A, di/dt=50A/μs		38	50	ns

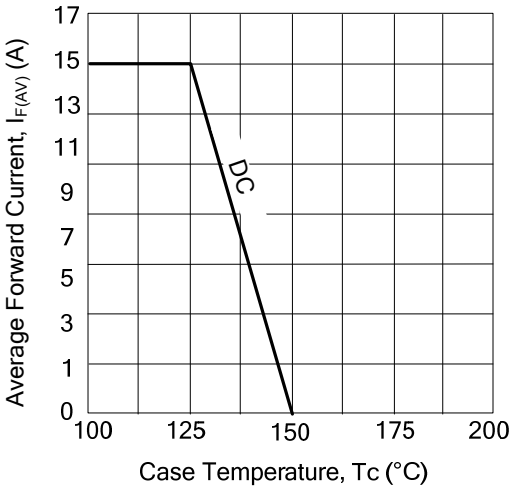
Notes: 1. Short duration pulse test used to minimize self-heating effect.
2. Thermal resistance junction to case mounted on heatsink.

■ TYPICAL CHARACTERICS

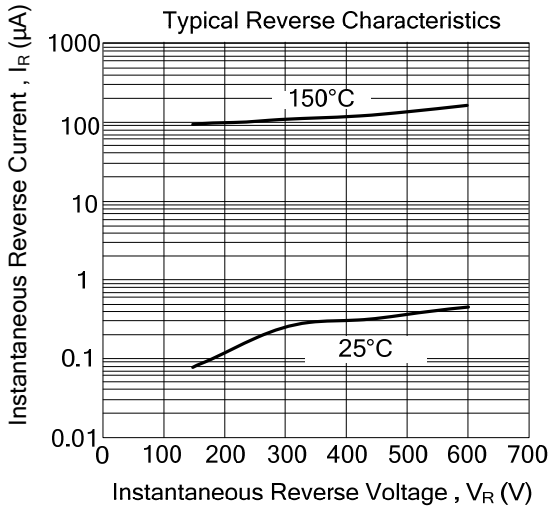
Typical Forward Characteristics



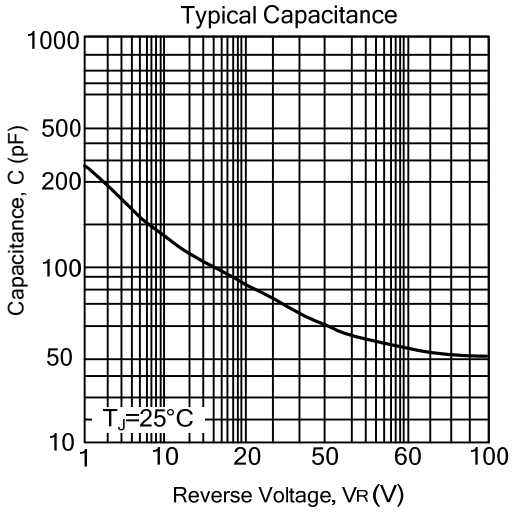
Current Derating,Case



Typical Reverse Characteristics



Typical Capacitance



Transient Thermal Response Curve