



UA60UP30

DIODE

ULTRAFAST RECOVERY
POWER RECTIFIER

■ DESCRIPTION

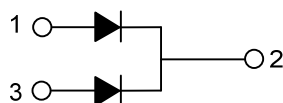
The UTC **UA60UP30** is an ultrafast recovery power rectifier, it uses UTC's advanced technology to provide customers with high peak repetitive reverse voltage and low leakage current, etc.

The UTC **UA60UP30** is suitable for switching mode power supply and power switching circuits, etc.

■ FEATURES

- * High peak repetitive reverse voltage
- * Ultra-short reverse recovery time
- * Low leakage current

■ SYMBOL



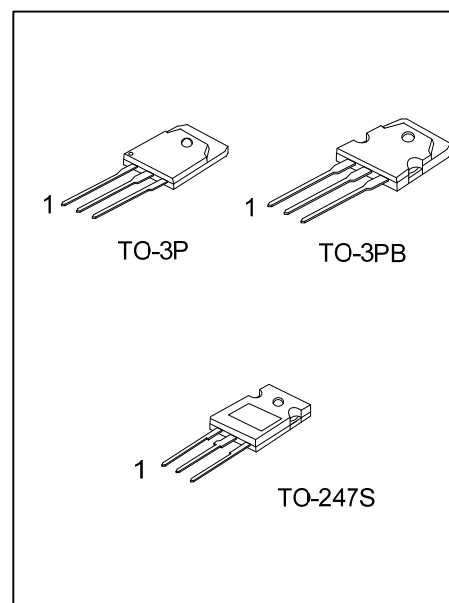
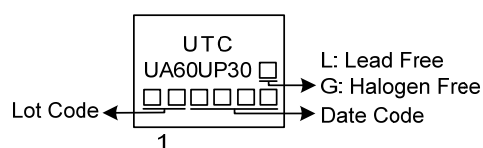
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UA60UP30L-T3B-T	UA60UP30G-T3B-T	TO-3PB	A	K	A	Tube
UA60UP30L-T3P-T	UA60UP30G-T3P-T	TO-3P	A	K	A	Tube
UA60UP30L-T47S-T	UA60UP30G-T47S-T	TO-247S	A	K	A	Tube

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

UA60UP30G-T3B-T (1) Packing Type (2) Package Type (3) Green Package	(1) T: Tube (2) T3B: TO-3PB, T3P: TO-3P, T47S: TO-247S (3) G: Halogen Free and Lead Free, L: Lead Free
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■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (PER DIODE) (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V _R	300	V
Working Peak Reverse Voltage	V _{RWM}	300	V
Peak Repetitive Reverse Voltage	V _{RRM}	300	V
Average Rectified Forward Current, T _C =135°C	I _{F(AV)}	30	A
Non-Repetitive Peak Surge Current 60Hz Single Half-Sine Wave	I _{FSM}	200	A
Operating Junction Temperature	T _J	-55 ~ +150	°C
Storage Temperature	T _{STG}	+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 CHARACTERISTICS

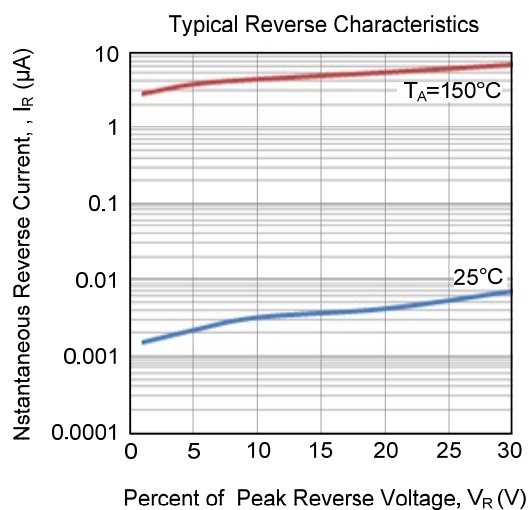
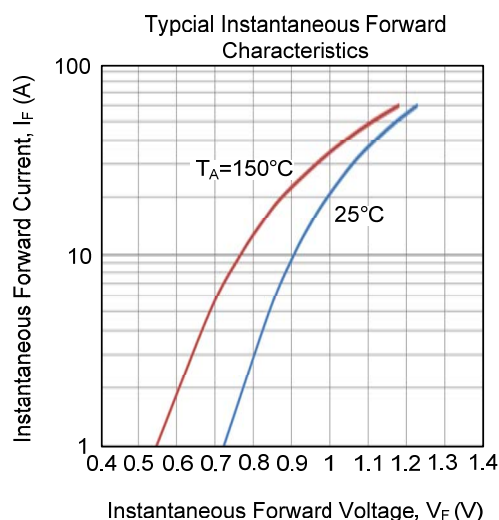
PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Case	θ _{JC}	0.53	°C/W

■ ELECTRICAL CHARACTERISTICS (PER DIODE) (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage (Note)	V _F	I _F =30A, T _C =25°C			1.50	V
		I _F =30A, T _C =150°C			1.30	V
Instantaneous Reverse Current (Note)	I _R	V _R =300V, T _C =25°C			100	μA
		V _R =300V, T _C =150°C			500	μA
Reverse Recovery Time	t _{rr}	I _F =1.0A, di/dt=100A/μs, V _{CC} =30V, T _C =25°C			45	ns
		I _F =30A, di/dt=200A/μs, V _{CC} =195V, T _C =25°C			55	ns
Recovered Charge	Q _{rr}	I _F =30A, di/dt=200A/μs, V _{CC} =195V, T _C =25°C		220		nC

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

■ TYPICAL CHARACTERISTICS



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