



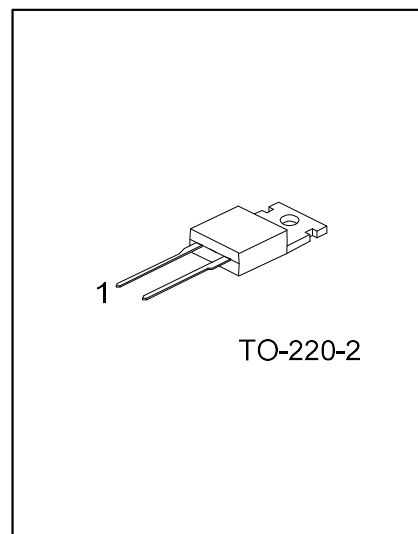
UUR15120

FAST RECOVERY EPITAXIAL DIODE

ULTRAFAST RECOVERY RECTIFIER

■ DESCRIPTION

The UTC **UUR15120** is a ultrafast recovery rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, low leakage, high current capability and high surge capability etc. These characteristics make it ideal for heavy duty applications that demand long term reliability. also fit into auxiliary functions such as snubber, bootstrap, and demagnetization applications.



■ FEATURES

- * Ultrafast, soft recovery
- * Very low conduction and switching losses
- * High frequency and or high pulsed current operation
- * High reverse voltage capability
- * High junction temperature
- * Green Product

■ SYMBOL



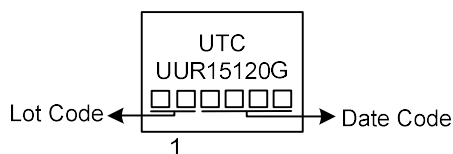
■ ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
UUR15120G-TA2-T	TO-220-2	K	A	Tube

Note: Pin Assignment: K: Cathode A: Anode

UUR15120G-TA2-T	(1)Packing Type	(1) T: Tube
	(2)Package Type	(2) TA2: TO-220-2
	(3)Green Package	(3) G: Halogen Free and Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_c=25°C, unless otherwise specified)

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V _{RRM}	1200	V
Average forward current	I _{F(AV)}	15	A
Surge non repetitive forward current	I _{FSM}	150	A
Operating Junction Temperature	T _J	+150	°C
Storage Temperature Range	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 DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Case	θ _{JC}	2	°C/W

Note: Device mounted on FR-4 substrate PC board, 2oz copper

■ ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz)

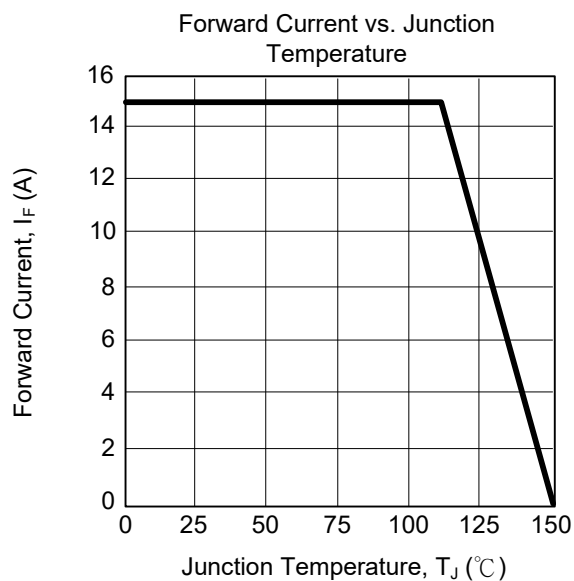
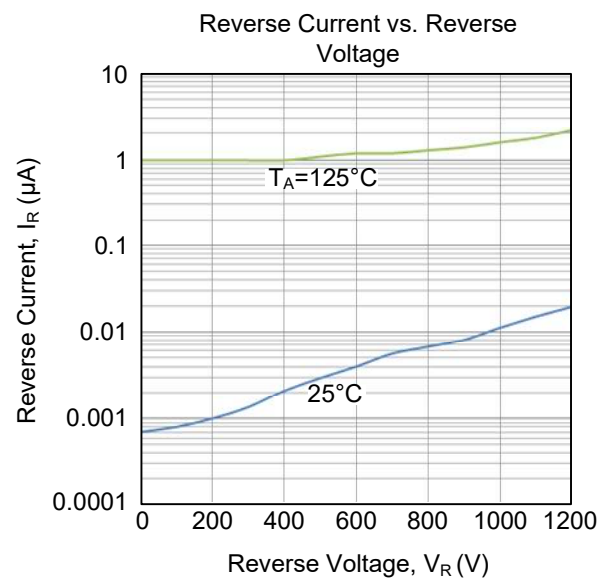
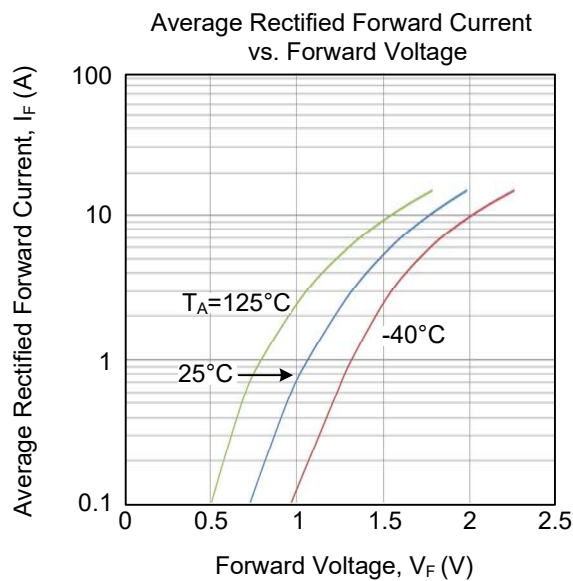
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward voltage drop (Note 1)	V _F	I _F =15A			2.6	V
		T _J =25°C				
		T _J =125°C			2.4	V
Instantaneous reverse current (Note 2)	I _R	V _R =V _{RRM}			15	μA
		T _J =25°C				
		T _J =125°C			100	μA
Reverse recovery time	t _{rr}	I _F =1.0A, V _R =30V, dI _F /dt=100A/μs, T _J =25°C		50		ns
		I _F =1.0A, V _R =400V, dI _F /dt=100A/μs, T _J =25°C		95		ns
		I _F =15A, V _R =30V, dI _F /dt=100A/μs, T _J =25°C		100		nS
		I _F =15A, V _R =400V, dI _F /dt=100A/μs, T _J =25°C		250		nS

Notes: 1. Pulse test: t_p = 380 ms, δ = 2 %.

2. Pulse test: t_p = 5 ms, δ = 2 %.

3. To evaluate the conduction losses use the following equation: P=1.4 × I_{F(AV)} + 0.027 I_F² (RMS).

■ TYPICAL CHARACTERISTICS



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