UNISONIC TECHNOLOGIES CO., LTD

UFR7560

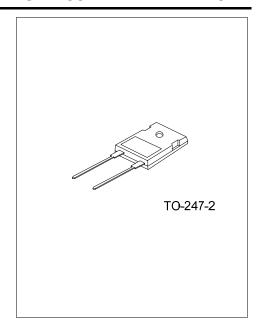
Preliminary

FAST RECOVERY EPITAXIAL DIODE

SUPERFAST RECOVERY RECTIFIER

DESCRIPTION

The UTC **UFR7560** is a superfast 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

- * Ultra-Fast Recovery Time for High Efficiency
- Low Forward Voltage Drop, High Current Capability and Low Power Loss

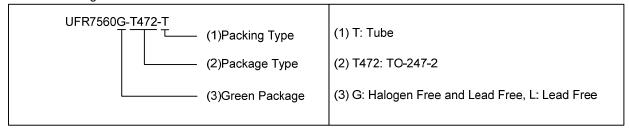
■ SYMBOL



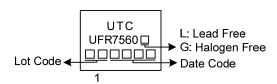
■ ORDERING INFORMATION

Ordering Number		Doolsone	Pin Ass	Dooking		
Lead Free	Halogen Free	Package	1	2	Packing	
UFR7560L-T472-T	UFR7560G-T472-T	TO-247-2	K	Α	Tube	

Note: Pin Assignment: K: Cathode A: Anode



■ MARKING



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■ **ABSOLUTE MAXIMUM RATINGS** (T_A=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}	600	V
Average forward current, δ= 0.5%	T _C =130°C	I _{F(AV)}	75	Α
Surge non repetitive forward current tp=10ms Sinusoidal		I _{FSM}	260	Α
Operating Junction Temperature		T_J	+150	°C
Storage Temperature Range		T _{STG}	-55 ~ +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}	0.8	°C/W	

■ 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 =75A	T _J =25°C			1.6	V
			T _J =125°C			1.5	V
Instantaneous Reverse Current	ı	\	T _J =25°C			10	μΑ
(Note 2)	I _R	$V_R = V_{RRM}$	T _J =125°C			500	μΑ
Reverse recovery time	t _{rr}	I_F =1.0A, V_R =30V, dI_F/dt =-100A/ μ s, T_J =25°C			46		ns
		I_F =30A, V_R =30V, dI_F/dt =-100A/ μ s T_J =25°C			72		ns
		I_F =30A, V_R =400V, dI_F/dt T_J =25°C	t=-100A/µs		114		ns

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

- 2. Pulse test: $t_P = 5$ ms, $\delta = 2$ %.
- 3. To evaluate the conduction losses use the following equation: $P=1.4 \times I_{F(AV)} + 0.027 I_F^2$ (RMS).

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