

UNISONIC TECHNOLOGIES CO., LTD

UMUR820 Preliminary DIODE

SWITCHMODE POWER RECTIFIERS

DESCRIPTION

The UTC UMUR820 is a switchmode power rectifiers, it uses UTC's advanced technology to provide customers with low forward voltage and low leakage current, etc.

The UTC UMUR820 is suitable for free inverters and switching power supplies, etc.

FEATURES

- * Low forward voltage
- * Low leakage current

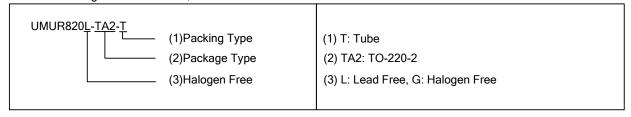
SYMBOL

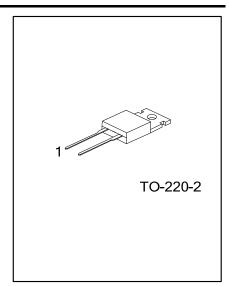


ORDERING INFORMATION

Ordering Number		Doolsone	Pin Assignment			Deaking	
Lead Free	Halogen Free	Package	1	2	3	Packing	
UMUR820L-TA2-T	UMUR820G-TA2-T	TO-220-2	K	Α	NC	Tube	

Pin Assignment: A: Anode, K: Cathode





■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_R	200	V
Working Peak Reverse Voltage	V_{RWM}	200	V
Peak Repetitive Reverse Voltage	V_{RRM}	200	V
Average Rectified Forward Current Per Total Device, (Rated V _R), T _C =150°C	I _{F(AV)}	8.0	Α
Peak Repetitive Forward Current (Rated V _R , Square Wave, 20kHz), T _C =150°C	I _{FM}	16	Α
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60Hz)	I _{FSM}	100	Α
Operating Junction Temperature	TJ	-65~+175	°C
Storage Temperature	T _{STG}	-65~+175	°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 Ambient	θ_{JA}	73	°C/W
Junction to Case	θ_{JC}	3.0	°C/W

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage (Note 1)	I	I _F =8.0A, T _C =25°C			0.975	V
		I _F =8.0A, T _C =150°C			0.895	V
Instantaneous Deverse Current (Note 1)	I _R	Rated DC Voltage, T _J =25°C			5.0	μA
Instantaneous Reverse Current (Note 1)		Rated DC Voltage, T _J =150°C			250	μΑ
Doverse Deceyory Time	I top	I _F =1.0A, di/dt=50A/μs			58	ns
Reverse Recovery Time		I _F =0.5A, I _R =1.0A, I _{REC} =0.25A			53	ns

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

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