

UTC UNISONIC TECHNOLOGIES CO., LTD

USR860

SUPERFAST RECOVERY RECTIFIER

DESCRIPTION

The UTC USR860 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

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

SYMBOL

ORDERING INFORMATION

Ordering Number		Deekege	Pin Assignment		Deeking	
Lead Free	Halogen Free	Раскаде	1	2	Packing	
USR860L-TA2-T	USR860G-TA2-T	TO-220-2	K	Α	Tube	
Note: Pin Assignment: A: An	ode K: Cathode					

USR860G-TA2-T	1)Packing Type	(1) T: Tube
(2	2)Package Type	(2) TA2: TO-220-2
(3	3)Green Package	(3) G: Halogen Free and Lead Free, L: Lead Free

MARKING





■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V _R	600	V
Working Peak Reverse Voltage	V _{RWM}	600	V
Peak Repetitive Reverse Voltage	V _{RRM}	600	V
Average Rectified Forward Current Per Total Device, (Rated V _R), T _C =150°C	I _{F(AV)}	8	А
Peak Repetitive Forward Current (Rated V_R , Square Wave, 20kHz), T _C =150°C	I _{FM}	16	А
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60Hz)	I _{FSM}	100	А
Operating Junction Temperature	TJ	-65 ~ +175	°C
Storage Temperature	T _{STG}	-65 ~ +175	С°

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 Ambient	θ _{JA}	73	°C/W	
Junction to Case	θ _{JC}	3	°C/W	

ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
	V _{FM}	I _F =8.0A, T _C =25°C			1.8	V
Instantaneous Forward Voltage (Note)		I _F =8.0A, T _C =150°C			1.3	V
Instantanagua Bayarag Current (Nata)	I _{RM}	Rated DC Voltage, TJ=25°C			5.0	μA
Instantaneous Reverse Current (Note)		Rated DC Voltage, T _J =150°C			250	μA
Reverse Recovery Time	t _{RR}	I _F =1.0A, di/dt=50A/µs			35	ns

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



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