

**Isolated Ultra Fast Rectifier**

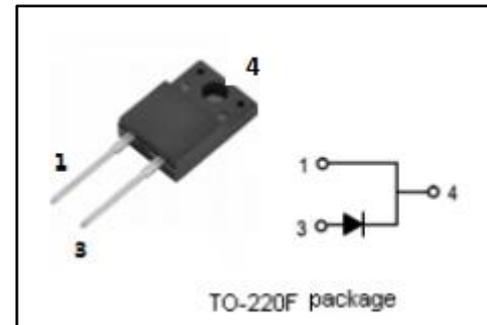
**UGF8JD**

**FEATURES**

- Low Forward Voltage
- High Efficiency
- Low leakage current
- High frequency switching power supply
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

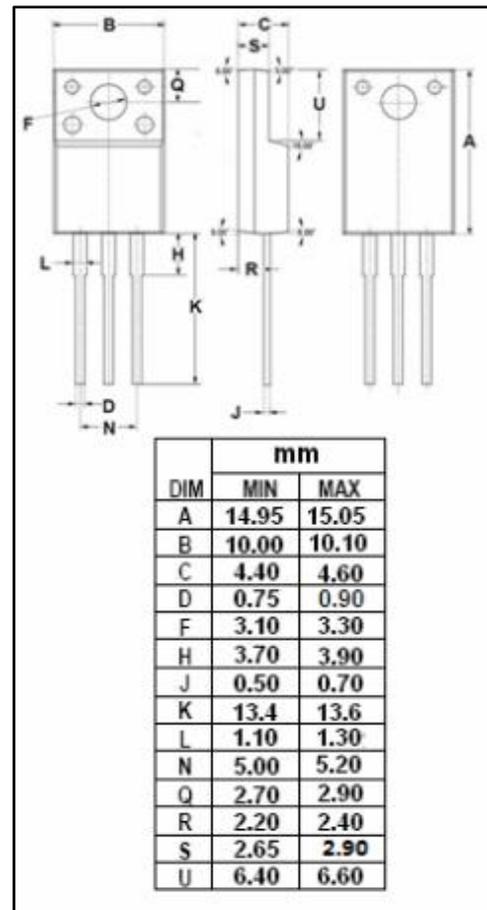
**APPLICATIONS**

- Be suited as free wheeling or boost diode in continuous mode power factor correctors and other power switching applications.



**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated V <sub>R</sub> 20Khz square wave) -50% duty cycle	8	A
I <sub>FSM</sub>	Peak forward surge current (8.3 ms single half sine-wave superimposed on rated load)	100	A
T <sub>J</sub>	Junction Temperature	-55~150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



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**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	4	°C/W

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300 μ s, Duty Cycle ≤ 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 8A ; T <sub>C</sub> = 25°C	2.3	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	Rated DC Voltage, T <sub>C</sub> = 25°C Rated DC Voltage, T <sub>C</sub> = 125°C	0.5 100	μA

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