

Isolated Ultra Fast Rectifier

INCHANGE SEMICONDUCTOR

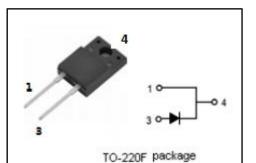
UGF8JD

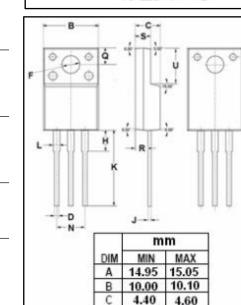
FEATURES

- 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.





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0.75

3.10

3.70

0.50

13.4

1.10

5.00

2.70

2.20

2.65

6.40

0.90

3.30

3.90

0.70

13.6 1.30

5.20

2.40

2.90

6.60



isc website: <u>www.iscsemi.com</u>

| SYMB OL | PARAMETER | VALUE | UNIT |
|--------------------|--|---------|------|
| Vrrm Vrwm Vr | Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | 600 | v |
| I _{F(AV)} | Average Rectified Forward Current (Rated V_R -20Khz square wave) -50% duty cycle | 8 | A |
| IFSM | Peak forward surge current (8.3 ms single half sine-wave superimposed on rated load) | 100 | A |
| TJ | Junction Temperature | -55~150 | °C |
| T _{stg} | Storage Temperature Range | -55~150 | °C |
| | | | |

¹ *isc & iscsemi* is registered trademark



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UGF8JD

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | МАХ | UNIT |
|---------------------|--------------------------------------|-----|------|
| R _{th j-c} | 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 |
|----------------|---------------------------------------|--|------------|------|
| VF | Maximum Instantaneous Forward Voltage | IF= 8A ; TC= 25℃ | 2.3 | V |
| I _R | Maximum Instantaneous Reverse Current | Rated DC Voltage, T _C = 25 $^{\circ}$ C Rated DC Voltage, T _C = 125 $^{\circ}$ C | 0.5 100 | μA |

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