

Ultra fast Rectifier

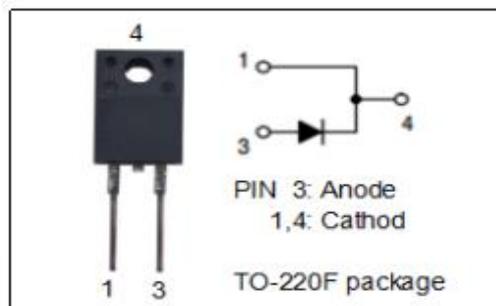
FFPF15S60S

FEATURES

- With TO-220F packaging
- Low switching loss
- High surge current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

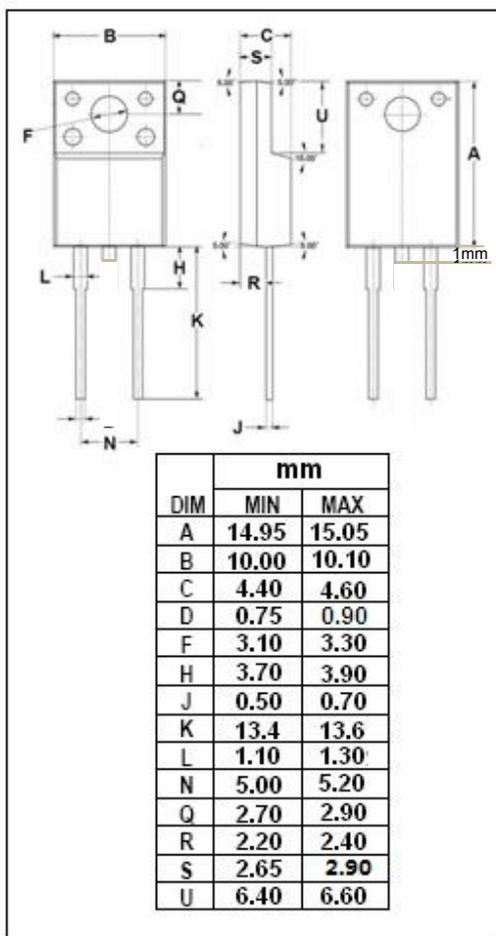
APPLICATIONS

- Switching power supply
- Power switching circuits
- General rectification



ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--|---|---------|------|
| V _{RRM} V _{RWM} V _R | Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage tw=500ns;duty=1/40 | 1500 | V |
| I _{F(AV)} | Average Rectified Forward Current @T _c =75°C | 15 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current | 150 | A |
| T _J | Junction Temperature | -65~150 | °C |
| T _{stg} | Storage Temperature Range | -65~150 | °C |



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THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 4.6 | °C/W |

ELECTRICAL CHARACTERISTICS(T_a=25°C) (Pulse Test: Pulse Width=300 μs, Duty Cycle≤2%)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|-----------------|---------------------------------------|---|------------|------|
| V _F | Maximum Instantaneous Forward Voltage | I _F =15A; T _J =25°C I _F =15A; T _J =125°C | 2.6 2 | V |
| I _R | Maximum Instantaneous Reverse Current | V _R = V _{RWM} ; T _J =25°C V _R = V _{RWM} ; T _J =125°C | 100 500 | μA |
| t _{rr} | Maximum Reverse Recovery Time | I _F =1A; di/dt=100A/ μs; V _R =30V | 30 | ns |

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