

**Ultra fast Rectifier**
**FFPF10F150S**
**FEATURES**

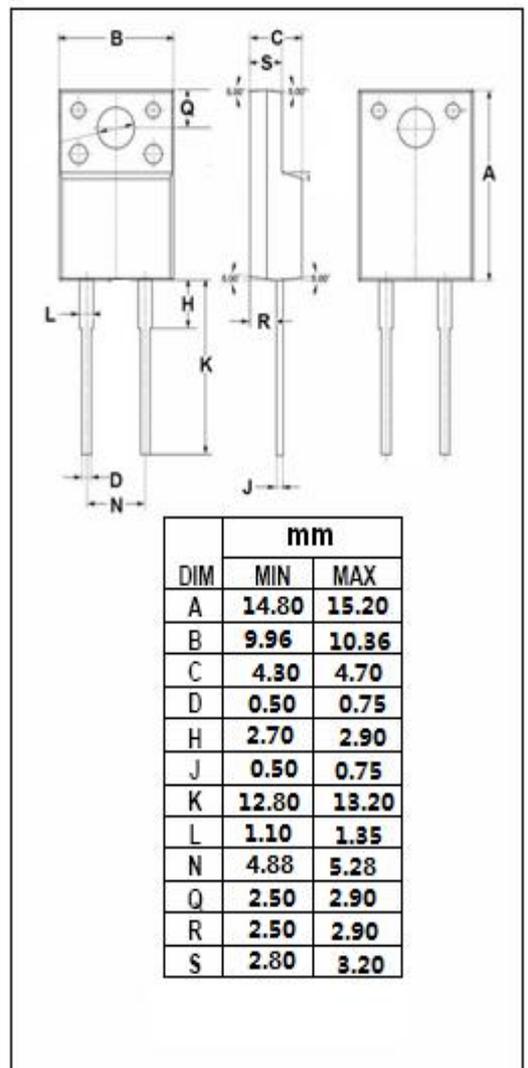
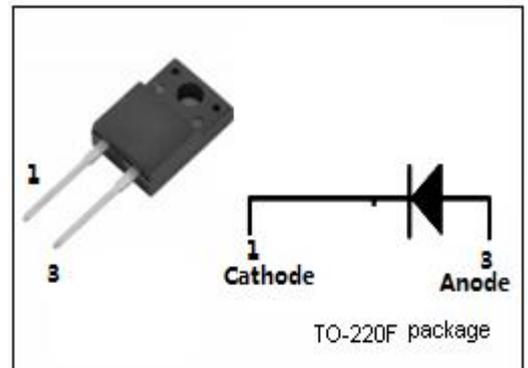
- With TO-220F packaging
- Low switching loss
- High surge current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching power supply
- Power switching circuits
- General rectification

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
VRRM VRWM VR	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage tw=500ns;duty=1/40	1500	V
IF(AV)	Average Rectified Forward Current @T <sub>c</sub> =75°C	10	A
IFSM	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions;One shot	100	A
TJ	Junction Temperature	-65~150	°C
Tstg	Storage Temperature Range	-65~150	°C



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**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{thj-c}$	Thermal Resistance, Junction to Case	3.0	°C/W

**ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$ ) (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle  $\leq$  2%)**

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F=10\text{A}; T_j=25^{\circ}\text{C}$ $I_F=10\text{A}; T_j=125^{\circ}\text{C}$	1.6 1.4	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=25^{\circ}\text{C}$ $V_R=V_{RWM}; T_j=125^{\circ}\text{C}$	10 80	$\mu$ A
$t_{rr}$	Maximum Reverse Recovery Time	$I_F=1\text{A}; di/dt=50\text{A}/\mu\text{s}$	170	ns

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