

Ultrafast Rectifier

FFPF20U40S

FEATURES

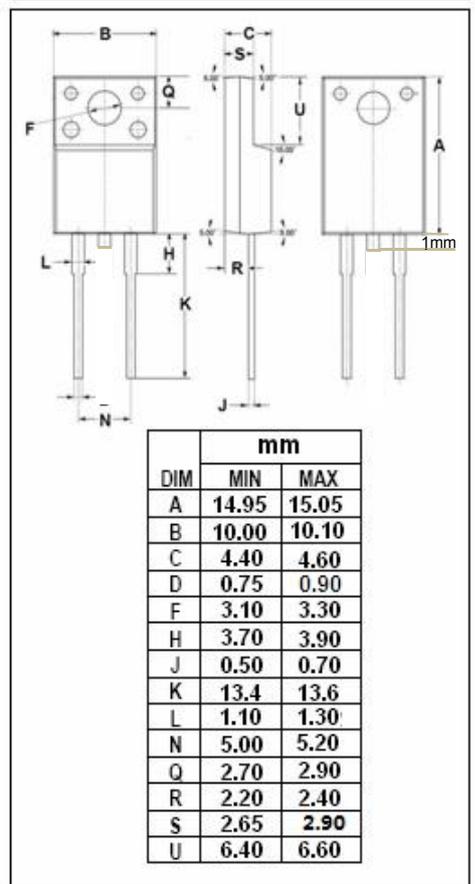
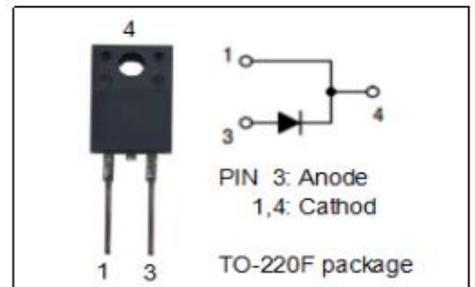
- Ultrafast with soft recovery
- Low forward voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching mode circuits
- Freewheeling diodes

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	400	V
I _{F(AV)}	Average Rectified Forward Current	20	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	200	A
P _D	Maximum power dissipation	100	W
T _J	Junction Temperature	-65~150	°C
T _{stg}	Storage Temperature Range	-65~150	°C



Ultrafast Rectifier**FFPF20U40S****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2	$^{\circ}C/W$

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}C$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{F^*}	Maximum Instantaneous Forward Voltage	$I_F=20A; T_j=25^{\circ}C$ $I_F=20A; T_j=100^{\circ}C$	1.4 1.3	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM};$ $V_R=V_{RWM}; T_j=100^{\circ}C$	50 500	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F=20A; di/dt=200A/\mu s$	50	ns

*:Pulse test ,Pulse width=300us,duty cycle \leq 2%

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