

Ultrafast Rectifier

FESF16JT

FEATURES

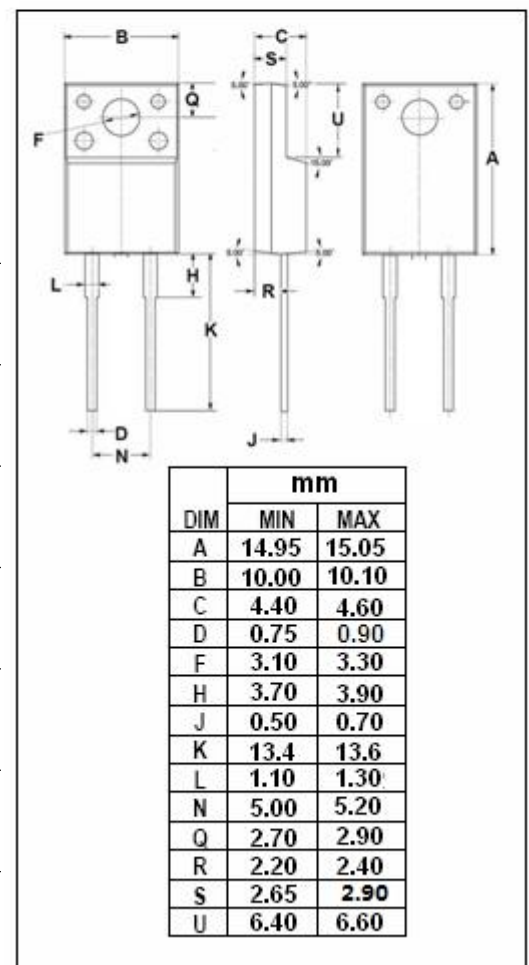
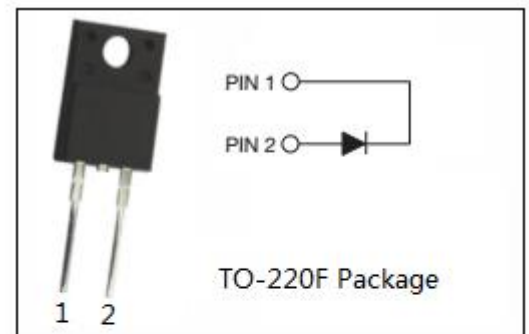
- Ultrafast recovery time
- Power pack
- Glass passivated pellet chip junction
- Low switching losses
- High efficiency
- High forward surge capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For sue in high frequency rectifier of switching mode power supplies,inverters,freewheeling diodes,DC/DC converters and other power switching applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
$I_{F(AV)}$	Average Rectified Forward Current	16	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	250	A
P_D	Maximum power dissipation	75	W
T_J	Junction Temperature	-65~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}\text{C}$



Fast Recovery Rectifier

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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	1.7	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=16\text{A}; T_j=25^{\circ}\text{C}$	1.5	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=100^{\circ}\text{C}$ $V_R=V_{RWM}$	500 10	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=0.5\text{A}; I_R=1.0\text{A}; I_{rr}=0.25\text{A};$	50	ns

*: Pulse test, Pulse width=300us, duty cycle $\leq 1\%$

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