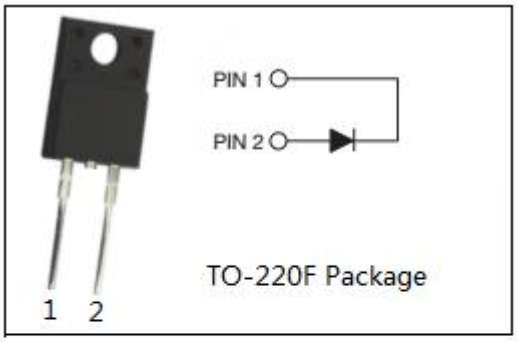
Ultrafast Rectifier

FESF16JT

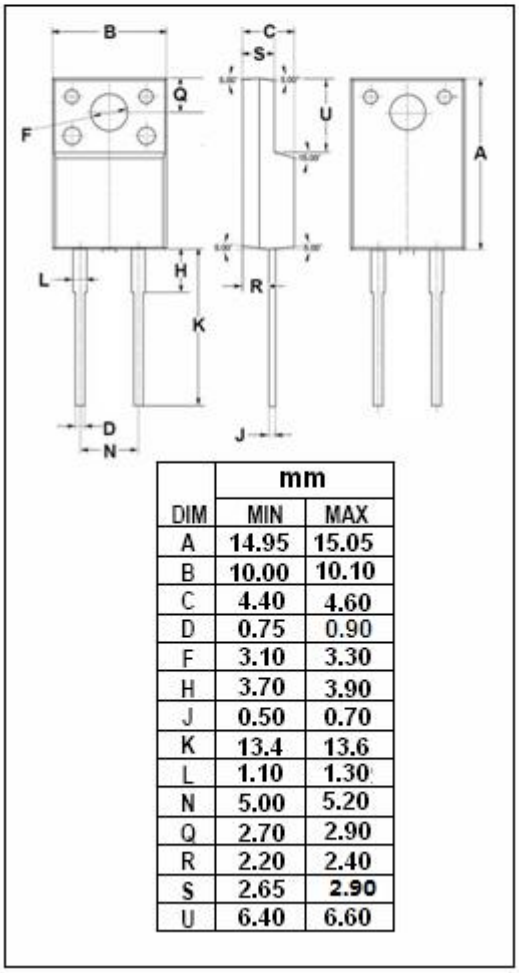
FEATURES

- 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



DIM	mm MIN	MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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	℃
T_{stg}	Storage Temperature Range	-65~150	℃

Fast Recovery Rectifier FESF16JT

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.7	℃/W

ELECTRICAL CHARACTERISTICS(T_a=25℃) (Pulse Test: Pulse Width=300 μ s,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{F*}	Maximum Instantaneous Forward Voltage	I_F=16A ;Tj=25℃	1.5	V
I_R	Maximum Instantaneous Reverse Current	V_R= V_{RWM};Tj=100℃ V_R= V_{RWM}	500 10	μ A
t_{rr}	Maximum Reverse Recovery Time	I_F =0.5A;I_R =1.0A;Irr =0.25A;	50	ns

*:Pulse test ,Pulse width=300us,duty cycle≤1%

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