

Ultrafast Rectifier
FES16JT
FEATURES

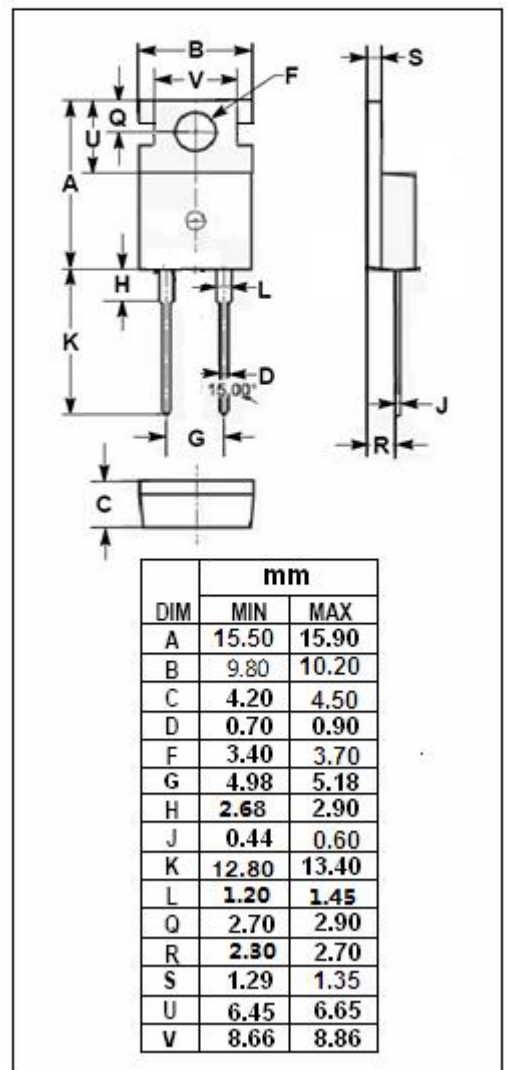
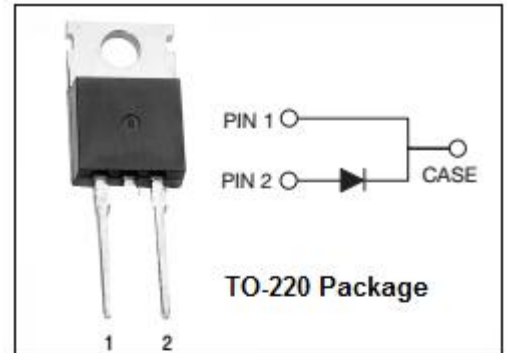
- Ultrafast recovery time
- Power pack
- Glass passivated pellet chip junction
- Low switching losses
- High efficiency
- High forward surge capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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°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	100	W
T _J	Junction Temperature	-65~150	°C
T _{stg}	Storage Temperature Range	-65~150	°C



Fast Recovery Rectifier
FES16JT
THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	1.2	$^{\circ}C/W$

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

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

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

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