

## Ultrafast Rectifier

**FES16JT**

### FEATURES

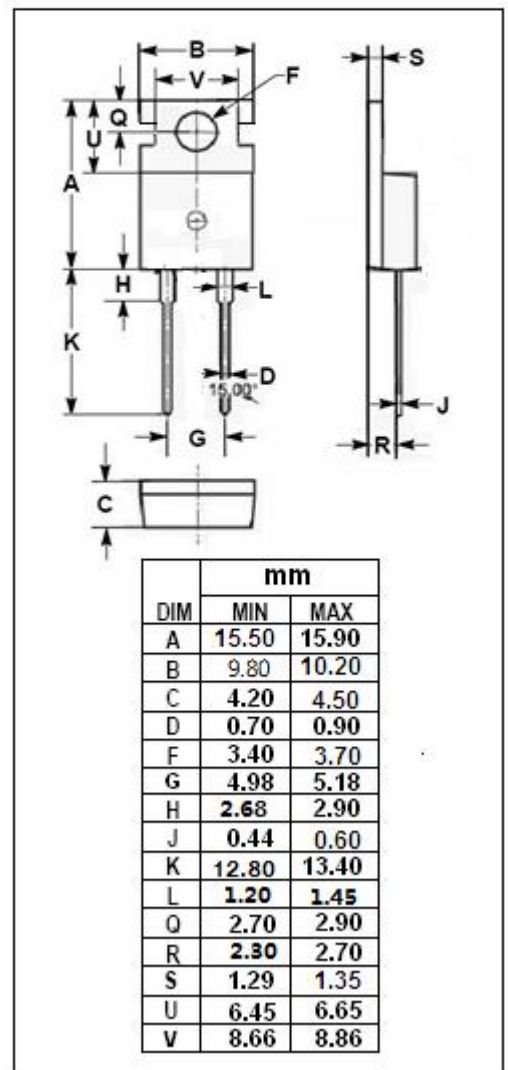
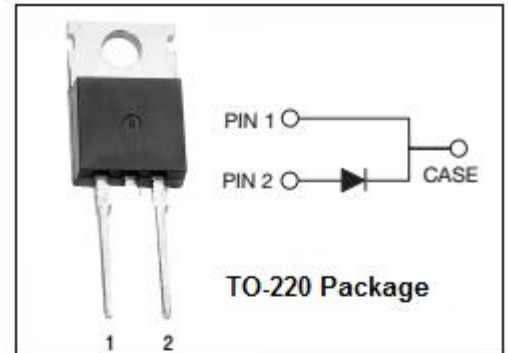
- Ultrafast recovery time
- Power pack
- Glass passivated pellet chip junction
- Low switching losses
- High efficiency
- High forward surge capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### 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( $T_a=25^{\circ}\text{C}$ )

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	100	W
$T_J$	Junction Temperature	-65~150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-65~150	$^{\circ}\text{C}$



## Fast Recovery Rectifier

FES16JT

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{thj-c}$	Thermal Resistance, Junction to Case	1.2	°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	$I_F=16\text{A}; T_j=25^{\circ}\text{C}$	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	$\mu\text{A}$
$t_{rr}$	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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