

Fast Rectifier

FEP16GT

FEATURES

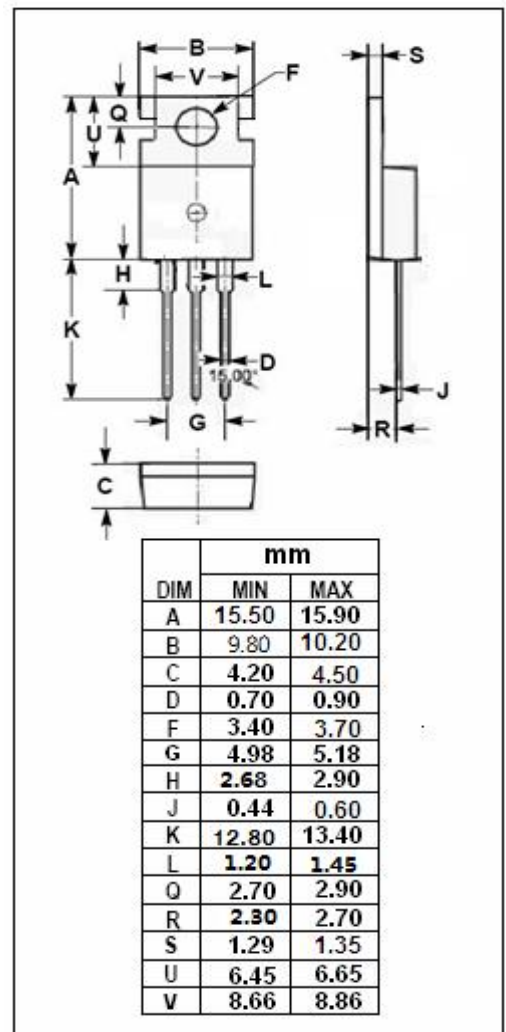
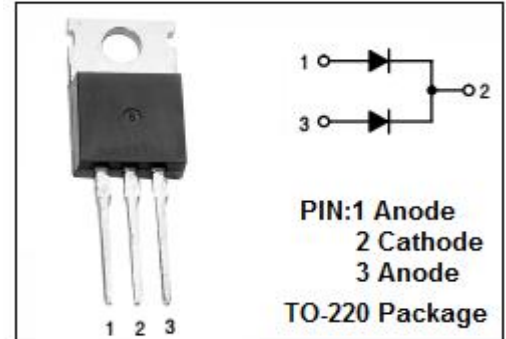
- With TO-220 packaging
- High junction temperature capability
- Low forward voltage
- High current capability
- Low power loss, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Free-Wheeling diodes
- Reverse battery protection

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RMS} V _R	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	400	V
I _{F(AV)}	Average Rectified Forward Current @T _c =100°C	16	A
I _{FSM}	Nonrepetitive Peak Surge Current (8.3ms single half sine-wave superimposed on rated load conditions)	200	A
P _D	Total Device Dissipation	8.33	W
T _J	Junction Temperature	-65~150	°C
T _{stg}	Storage Temperature Range	-65~150	°C



Fast Rectifier**FEP16GT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	15	$^{\circ}C/W$

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=8A$	1.3	V
I_R	Maximum Instantaneous Reverse Current	$V_R=$ rated V_{RRM} ; @ $T_j=25^{\circ}C$ $T_j=100^{\circ}C$	10 500	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F=0.5A; I_R=1.0A; I_{rr}=0.25A$	50	ns

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