Fast Recovery Rectifier
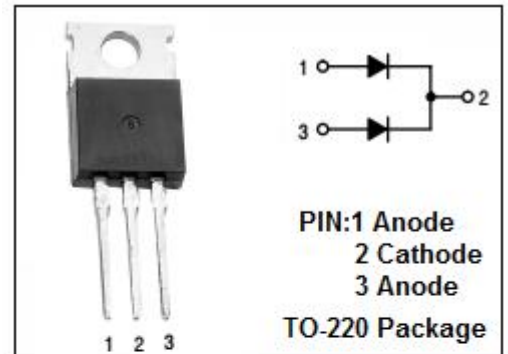
FEP16JT

FEATURES

· High surge current capability
· Low forward voltage, high current capability
· Low power loss
· Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

· Switching power supply
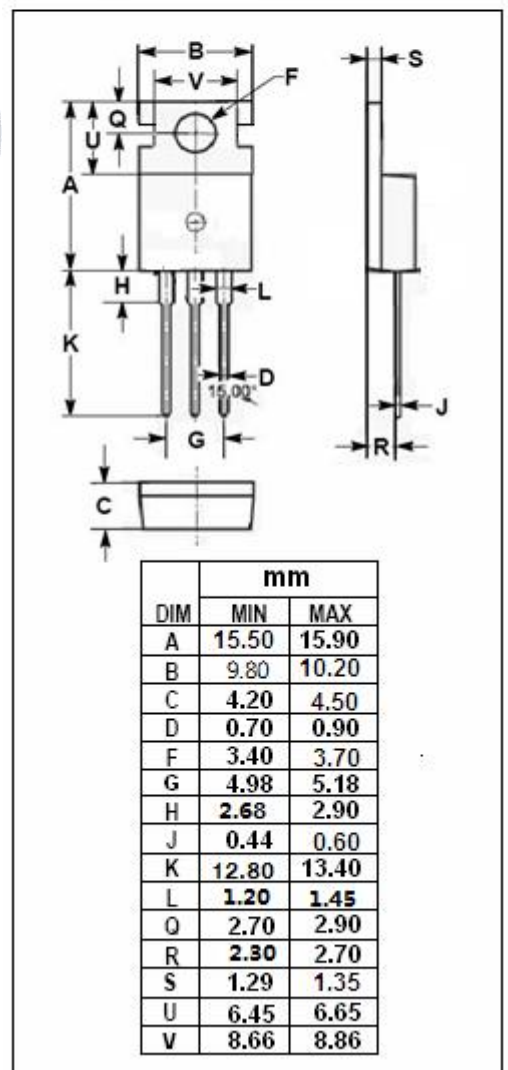· Power switching circuits
· General purpose

PIN:1 Anode
2 Cathode
3 Anode
TO-220 Package

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage	600	V
$I_{F(AV)}$	Average Rectified Forward Current	16	A
I_{FSM}	Nonrepetitive Peak Surge Current (8.3ms single half sine-wave superimposed on rated load)	125	A
T_J	Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance,Junction to Case	2.2	℃/W

DIM	mm	
	MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F=8A ; T_C=25℃	1.5	V
I_R	Maximum Instantaneous Reverse Current	V_R= V_{RWM}; T_C=150℃ V_R= V_{RWM}; T_C=25℃	500 10	μA
t_{rr}	Maximum Reverse Recovery Time	I_F =0.5A; I_R=1A; I_{rr}=0.25A	50	ns

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