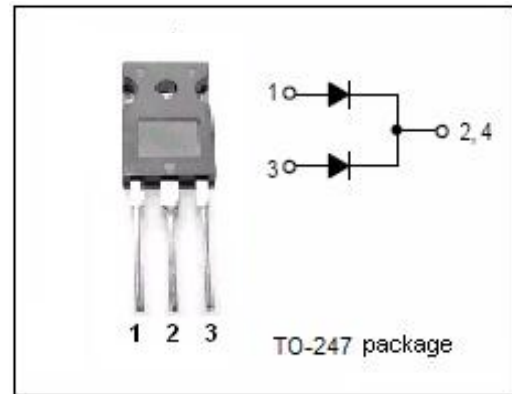


Ultrafast Rectifier
FEP30FP
FEATURES

- Guarding for over voltage protection
- Dual rectifier construction, positive center-tap
- Low forward voltage; high current capability
- Low thermal resistance
- Low power loss
- Superfast recovery times for high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose


ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

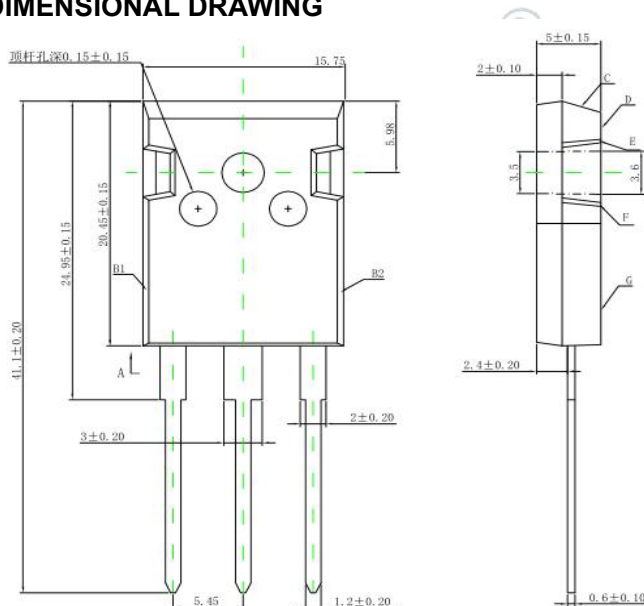
SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	300 210 300	V
I _{F(AV)}	Average Rectified Forward Current	30	A
I _{FSM}	Non-repetitive Peak Surge Current	300	A
T _J	Max. Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1	°C/W

Ultrafast Rectifier
FEP30FP
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$) (Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=15\text{A}$	1.3	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_R$ Rated; $T_j=25^{\circ}\text{C}$ $V_R=V_R$ Rated; $T_j=150^{\circ}\text{C}$	10 500	μA
t_{rr}	Maximum Reverse Recovery Time;per leg	$I_F=0.5\text{A}; I_R=1\text{A}; I_{rr}=0.25\text{A}$	50	ns

DIMENSIONAL DRAWING

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