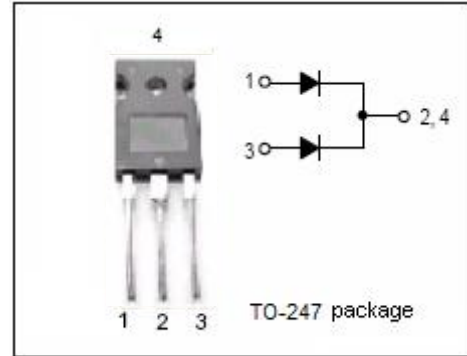


Ultrafast Recovery Rectifier
SF3006PT
FEATURES

- Ultrafast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in switching power supplies, inverters and as free wheeling diodes.


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	400	V
I _{F(AV)}	Average Rectified Forward Current	30	A
I _{FSM}	Nonrepetitive Peak Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	300	A
T _J	Junction Temperature	-40~150	°C
T _{stg}	Storage Temperature Range	-40~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2.5	°C/W

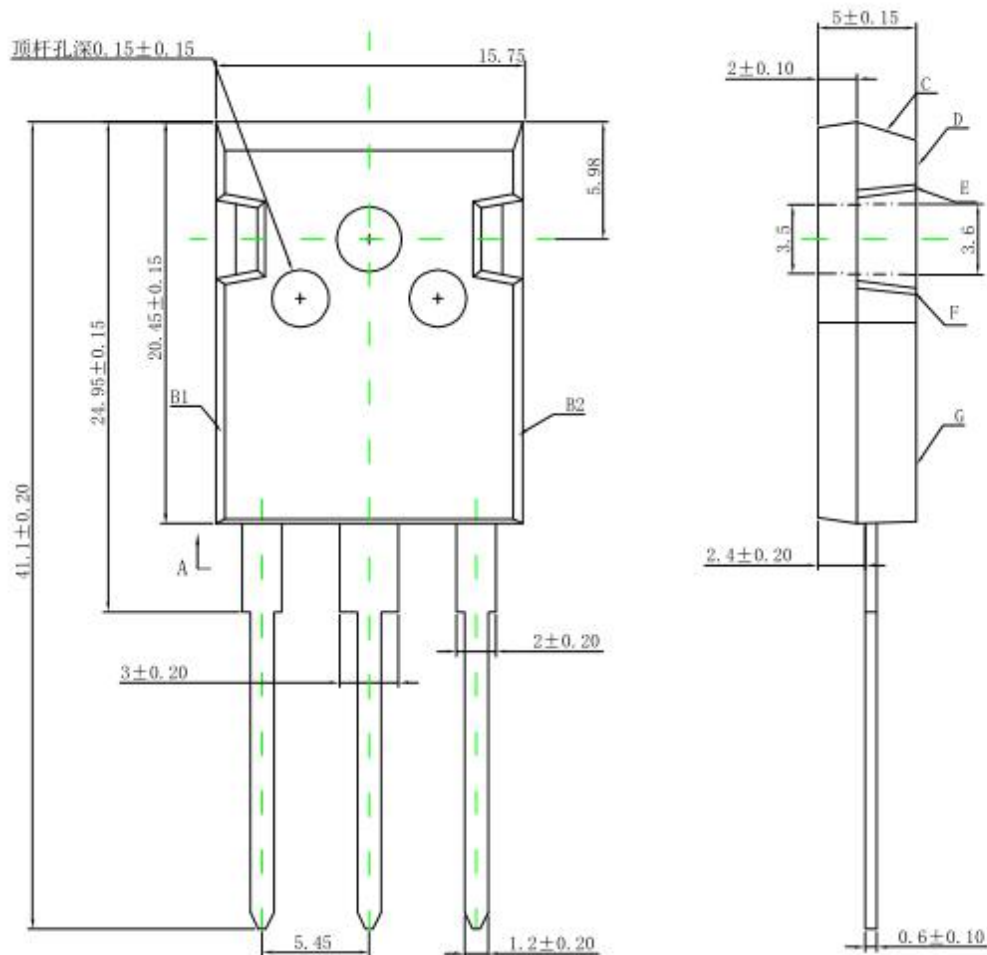
ELECTRICAL CHARACTERISTICS(T_a=25°C) (Pulse Test: Pulse Width=300 μ s, Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Instantaneous Forward Voltage	I _F = 15A	1.3	V
I _R	Instantaneous Reverse Current	V _{RRM} = 400V	10	μ A
t _{rr}	Reverse Recovery Time	I _F = 0.5 A, I _R = 1.0 A, I _{REC} = 0.25 A	35	ns

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OUTLINE DRAWING

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