



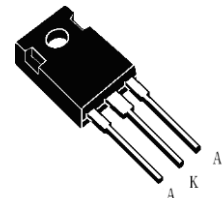
# AFP30U60AB

## 主要参数 MAIN CHARACTERISTICS

$I_F(AV)$	15×2 A
$V_{RRM}$	600 V
$V_F(\text{typ})$	1.95V
$T_{rr}(\text{typ})$	24ns

## 封装 Package

TO-247



## 用途

- 不间断电源
- 开关电源
- 感应加热
- 超声清洗机和焊机
- 高频开关器件并联二极管

## APPLICATIONS

- UPS
- Switch power supply
- Inductive heating
- Ultrasonic cleaners and welders
- Antiparalle Diode for high frequency switching devices

## 产品特性

- 超快恢复时间
- 低恢复损耗
- 低漏电流
- 符合 AEC-Q101

## FEATURES

- Ultrafast Recovery Time
- Low Recovery Loss
- Low Leakage Current
- Qualified to AEC-Q101

## 订货信息 ORDER MESSAGE

订货型号 Order codes		印记 Marking	封装 Package
有卤-条管 Halogen-Tube	无卤-条管 Halogen Free-Tube		
AFP30U60AB-GE-B	AFP30U60AB-GE-BR	AFP30U60AB	TO-247

**绝对最大额定值 ABSOLUTE RATINGS (Tc=25°C)**

项 目 Parameter	符 号 Symbol	数 值 Value	单 位 Unit
最大反向重复峰值电压 Repetitive peak reverse voltage	V <sub>RRM</sub>	600	V
最大反向工作峰值电压 Working Peak Reverse Voltage	V <sub>RWM</sub>	600	V
平均正向整流电流 T <sub>C</sub> =100°C Average Forward Rectified Current	Per Package	30	A
	Per Diode	15	
非重复浪涌正向电流 Non-Repetitive Surge Forward Current t=8.3ms	I <sub>FSM</sub>	150	A
最高工作结温 Maximum operating junction temperature	T <sub>j</sub>	150	°C
储存温度 Storage temperature range	T <sub>STG</sub>	-55~+150	°C

**电特性 ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise specified) per diode**

项 目 Parameter	测试条件 Tests conditions		最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单 位 Unit
V <sub>R</sub>	I <sub>R</sub> = 50μA		600	700		V
I <sub>R</sub>	T <sub>j</sub> = 25°C	V <sub>R</sub> = V <sub>RRM</sub>			10	μA
	T <sub>j</sub> = 150°C			40	400	μA
V <sub>F</sub>	T <sub>j</sub> = 25°C	I <sub>F</sub> = 15A		1.95	2.2	V
	T <sub>j</sub> = 150°C			1.4	1.7	V
C <sub>j</sub>	V <sub>R</sub> = 4.0V, f = 1.0 MHz			100		pF
T <sub>rr</sub>	I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>RR</sub> = 0.25A			24	30	ns
T <sub>rr</sub>	I <sub>F</sub> = 1A, V <sub>R</sub> = 30V, di <sub>F</sub> /dt = -200A/μs			30	45	ns
T <sub>rr</sub>	I <sub>F</sub> = 15A, V <sub>R</sub> = 400V, di <sub>F</sub> /dt = 100A/μs			120		ns
I <sub>RM</sub>	T <sub>j</sub> = 125°C			3.1	5.0	A

**热特性 THERMAL CHARACTERISTICS (maximum)**

项 目 Parameter	符 号 Symbol	最大值 Value(max)	单 位 Unit
结到管壳的热阻 Thermal Resistance Junction to Case	R <sub>th(j-c)</sub>	0.8	°C/W





### 特征曲线 ELECTRICAL CHARACTERISTICS (curves)

Fig.1 TYPICAL FORWARD CHARACTERISTICS

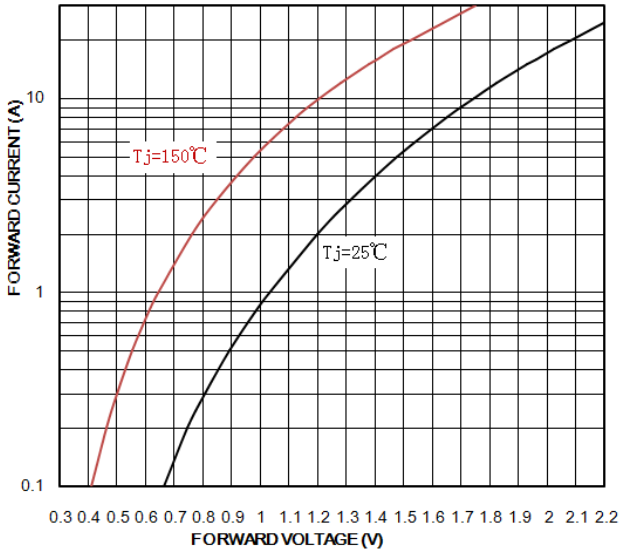


Fig.2 TYPICAL REVERSE CHARACTERISTICS

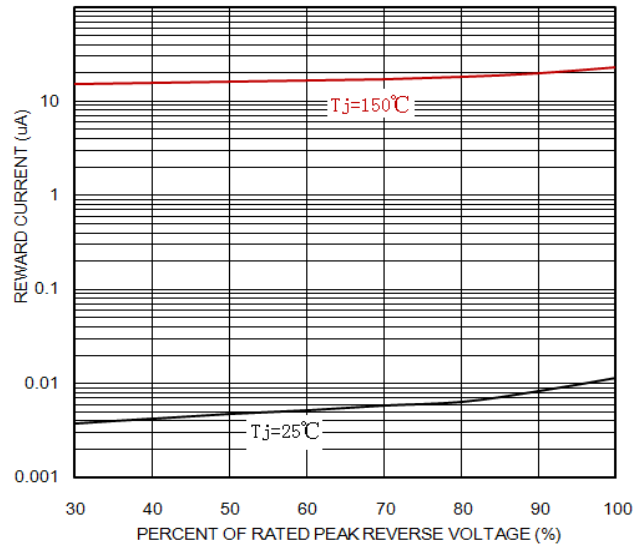


Fig.3 FORWARD CURRENT DERATING CURVE

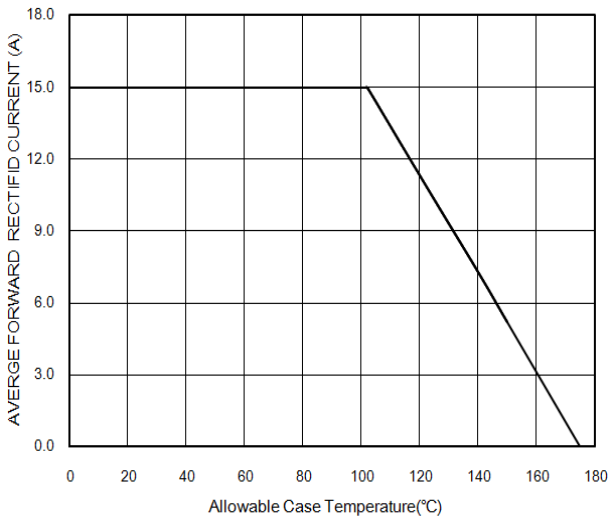


Fig.4 TYPICAL JUNCTION CAPACITANCE

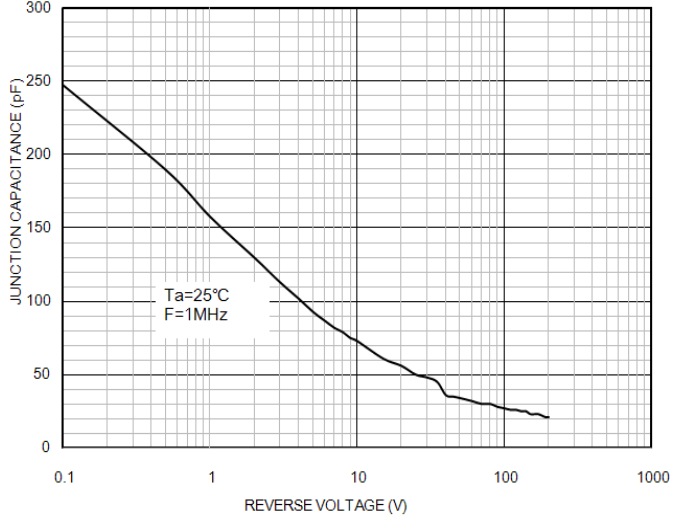


Fig.5 Reverse recovery time versus di/dt

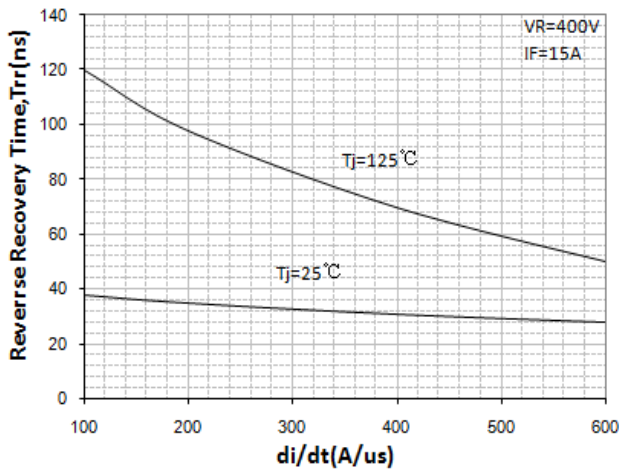
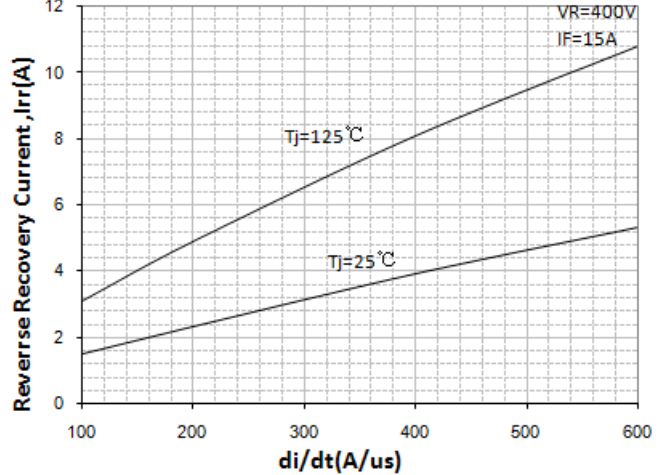


Fig.6 Peak reverse recovery current versus di/dt

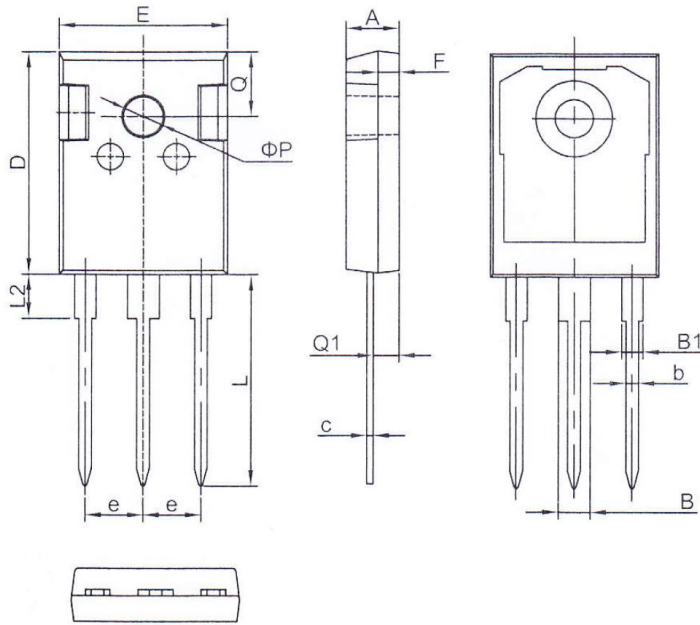




外形尺寸 PACKAGE MECHANICAL DATA

TO-247

单位 Unit : mm



符号 symbol	MIN	MAX
A	4.90	5.10
B	2.95	3.35
B1	1.95	2.35
b	1.15	1.35
c	0.50	0.70
D	20.90	21.10
E	15.70	15.90
e	5.34	5.54
F	1.90	2.10
L	19.40	20.40
L2	4.03	4.23
Q	6.00	6.40
Q1	2.30	2.50
P	3.50	3.70





### 注意事项

1. 吉林华微电子股份有限公司的产品销售分为直销和销售代理，无论哪种方式，订货时请与公司核实。
2. 购买时请认清公司商标，如有疑问请与公司本部联系。
3. 在电路设计时请不要超过器件的绝对最大额定值，否则会影响整机的可靠性。
4. 本说明书如有版本变更不另外告知。

### NOTE

1. Jilin Sino-microelectronics co., Ltd sales its product either through direct sales or sales agent , thus, for customers, when ordering , please check with our company.
2. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.
3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Jilin Sino-microelectronics co., Ltd reserves the right to make changes in this. specification sheet and is subject to change without prior notice.

### 联系方式

#### 吉林华微电子股份有限公司

公司地址：吉林省吉林市深圳街 99 号

邮编：132013

总机：86-432-64678411

传真：86-432-64665812

网址：www.hwdz.com.cn

### CONTACT

#### JILIN SINO-MICROELECTRONICS CO., LTD.

ADD: No.99 Shenzhen Street, Jilin City, Jilin Province, China.

Post Code: 132013

Tel: 86-432-64678411

Fax: 86-432-64665812

Web Site: www.hwdz.com.cn

