



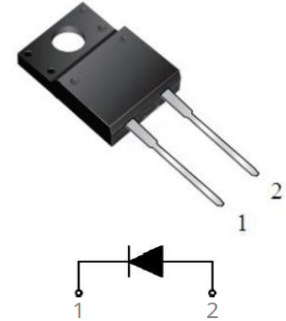
# 20F60HF

## 主要参数 MAIN CHARACTERISTICS

IF(AV)	20A
VRRM	600 V
VF(typ)	1.5V
trr (typ)	30ns

## 封装 Package

TO-220HF-2L



## 用途

- 吸收回路
- 开关电源
- UPS
- 高频开关器件并联二极管

## APPLICATIONS

- Snubber diode
- Switch power supply
- UPS
- Antiparalle Diode for high frequency switching devices

## 产品特性

- 低功耗, 高效率
- 高浪涌电流
- 高可靠性
- 环保 (RoHS) 产品

## FEATURES

- Low power loss, high efficiency
- High surge current capability
- High reliability
- RoHS product

## 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		
20F60HF-FL-B	20F60HF-FL-BR	20F60HF	TO-220HF-2L

**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
正向平均整流电流 Average forward Current T <sub>C</sub> =100°C	I <sub>F(AV)</sub>	20	A
峰值单脉冲浪涌电流 Peak one Cycle Surge Forward Current(Non-Repetitive) t=10ms	I <sub>FSM</sub>	200	A
结温 Junction Temperature	T <sub>j</sub>	-50~+150	°C
储存温度 Storage temperature range	T <sub>STG</sub>	-50~+150	°C
安装扭矩 Torque (to heatsink)	Torque	4.0-6.0	Kg • cm

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

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> =125°C		-	-	200	μA
V <sub>F</sub>	T <sub>j</sub> =25°C	I <sub>F</sub> =20A	-	1.5	1.9	V
	T <sub>j</sub> =125°C		-	-	1.7	V
T <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>RR</sub> =0.25A		-	30	45	ns
T <sub>rr</sub>			-	101.5	-	ns
Q <sub>rr</sub>	I <sub>F</sub> =20A, V <sub>R</sub> =400V, di <sub>F</sub> /dt=300A/μs T <sub>j</sub> =25°C		-	237.27	-	nc
I <sub>RM</sub>			-	4.48	-	A
T <sub>rr</sub>			-	128.2	-	ns
Q <sub>rr</sub>	I <sub>F</sub> =20A, V <sub>R</sub> =400V, di <sub>F</sub> /dt=300A/μs T <sub>j</sub> =125°C		-	854.34	-	nc
I <sub>RM</sub>			-	10.84	-	A

**热特性 THERMAL CHARACTERISTICS (maximum) Per Diode**

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>	3.5	°C/W
结到环境的热阻 Thermal Resistance Junction to ambient	R <sub>th(j-A)</sub>	60	°C/W





### 特征曲线 ELECTRICAL CHARACTERISTICS (curves)

Fig.1 TYPICAL FORWARD CHARACTERISTICS

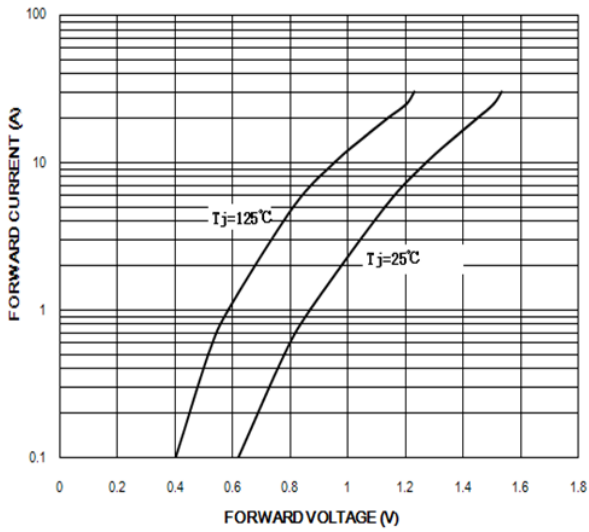


Fig.2 TYPICAL REVERSE CHARACTERISTICS

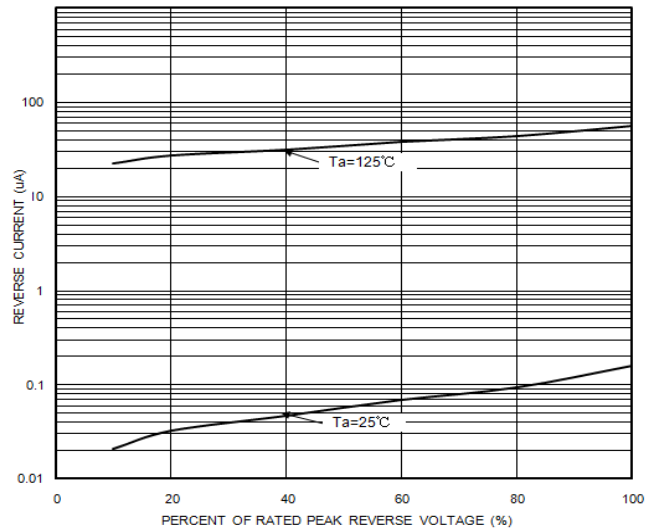


Fig.3 TYPICAL JUNCTION CAPACITANCE

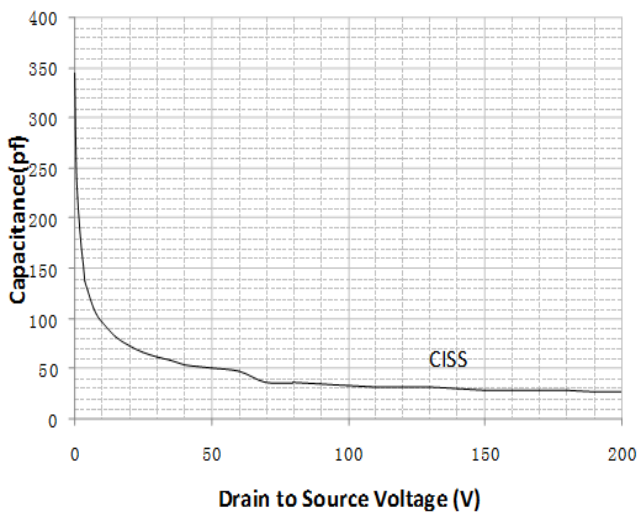
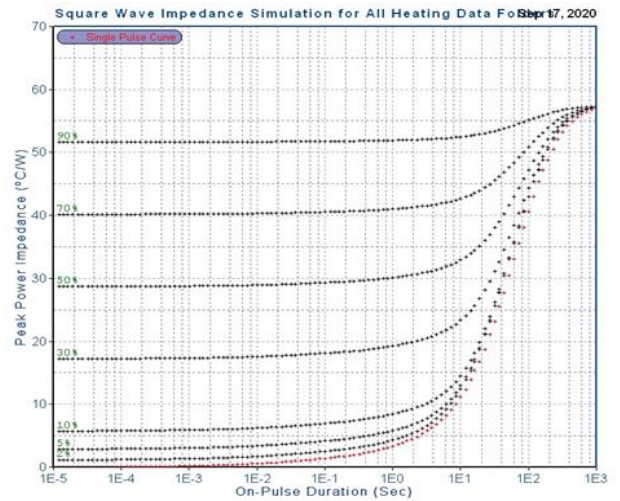
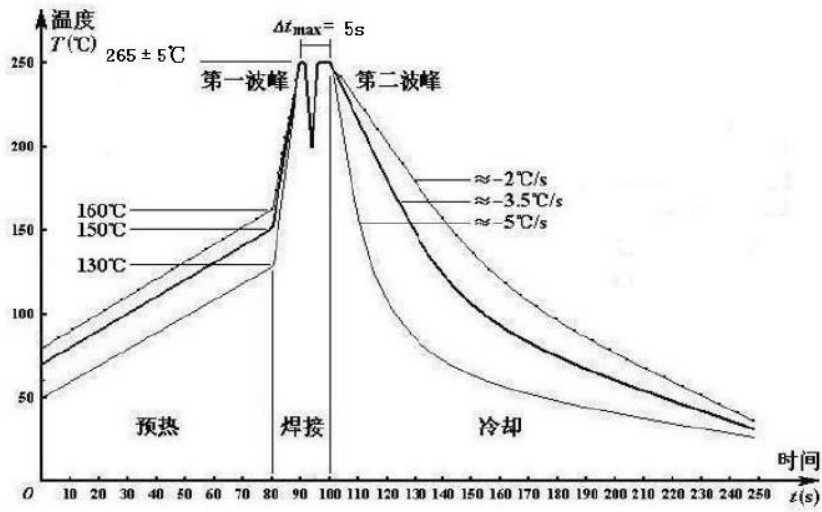


Fig.4 Transient Thermal Response Curve  $R_{th(j-A)}$



## 焊接曲线

## wave soldering

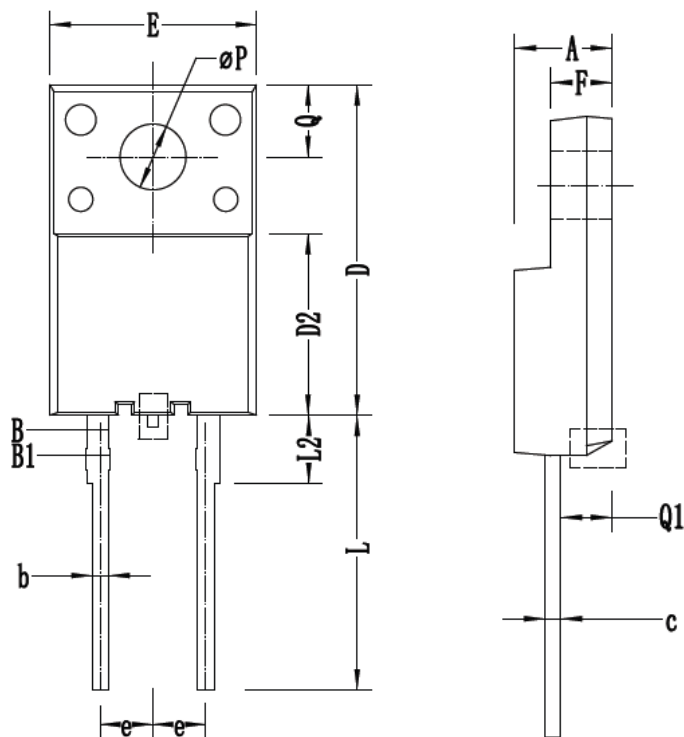




外形尺寸 PACKAGE MECHANICAL DATA

**TO-220HF2L**

单位 Unit : mm



mm		
SYMBOL	MIN	MAX
A	4.00	5.00
B1	0.87	1.27
B	0.82	1.22
b	0.72	0.92
c	0.50	0.70
D	15.00	16.50
D2	7.80	9.40
E	9.62	10.62
e	2.54TYP	
F	2.30	3.30
L	12.00	14.00
L2	3.10	3.50
ΦP	3.00	3.40
Q	3.15	3.55
Q1	2.20	2.50

注:

1. 虚框区域表示: 塑封体下方有、无余留, 塑封体背面有、无台阶, 均为我司受控外形;





### 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

