

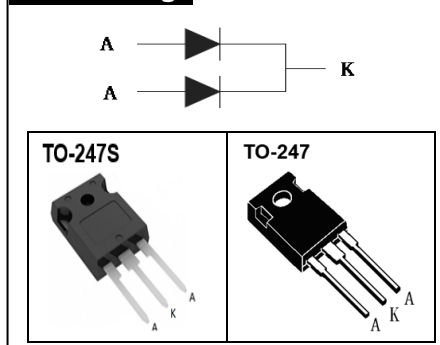


# 80F40WS3

## 主要参数 MAIN CHARACTERISTICS

$I_F(AV)$	40×2 A
$V_{RRM}$	400 V
$V_F(\text{typ})$	1.25V
$t_{rr}(\text{typ})$	40ns

## 封装 Package



## 用途

- 逆变焊机
- 开关电源
- UPS
- 高频开关器件并联二极管

## APPLICATIONS

- Inversion Welder
- Switch power supply
- UPS
- Antiparalle Diode for high frequency switching devices

## 产品特性

- 超快恢复时间
- 软恢复特性
- 低正向压降
- 低漏电流

## PRODUCT FEATURES

- Ultrafast Recovery Time
- Soft Recovery Characteristics
- Low Forward Voltage
- Low Leakage Current

## 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		
80F40WS3-GG-B	80F40WS3-GG-BR	80F40WS3	TO-247S
80F40WS3-GE-B	80F40WS3-GE-BR	80F40WS3	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
Maximum Repetitive Reverse Voltage	V <sub>RRM</sub>	400	V
Average forward current T <sub>C</sub> =110°C rectangular d=0.5	I <sub>F(AV)</sub>	40	A
Per Diode		80	
Per Package			
Non-Repetitive Surge Forward Current t=10ms	I <sub>FSM</sub>	400	A
Junction Temperature	T <sub>j</sub>	-40~+150	°C
Storage temperature range	T <sub>STG</sub>	-40~+150	°C

**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		400			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				150	μA
V <sub>F</sub>	T <sub>j</sub> = 25°C	I <sub>F</sub> = 40A		1.25	1.85	V
	T <sub>j</sub> = 125°C				1.5	V
trr	I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1A, I <sub>RR</sub> = 0.25A			40	60	ns
trr	I <sub>F</sub> = 40A, V <sub>R</sub> = 270V, di <sub>F</sub> /dt = -200A/μs		-	50	-	ns
I <sub>RRM</sub>	T <sub>C</sub> = 25°C		-	4.6	-	A
trr	I <sub>F</sub> = 40A, V <sub>R</sub> = 270V, di <sub>F</sub> /dt = -200A/μs		-	75	-	ns
I <sub>RRM</sub>	T <sub>C</sub> = 125°C		-	8.9	-	A

**热特性 THERMAL CHARACTERISTICS**

项 目 Parameter	符 号 Symbol	数 值 Value	单 位 Unit
Thermal resistance from 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

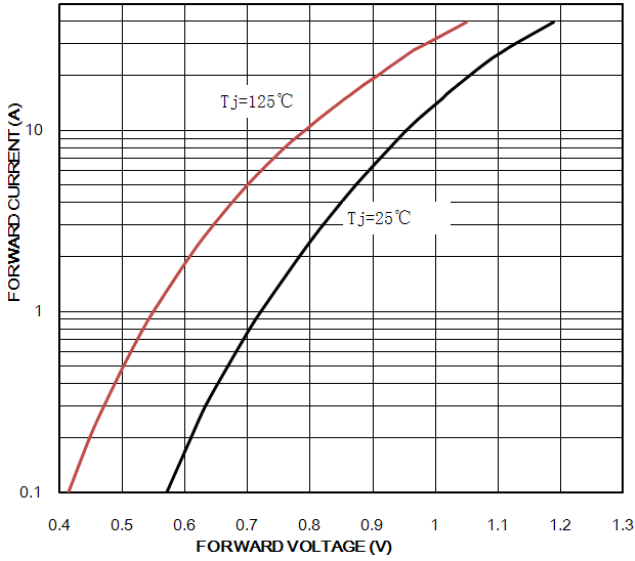


Fig.2 TYPICAL REVERSE CHARACTERISTICS

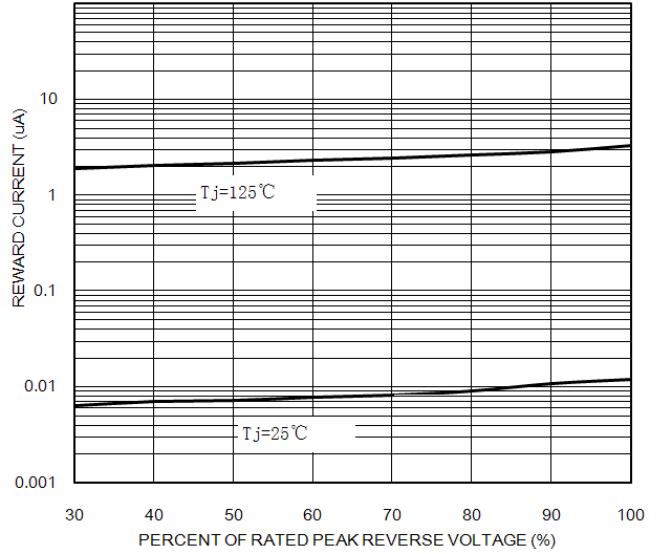


Fig.3 Reverse recovery time versus di/dt

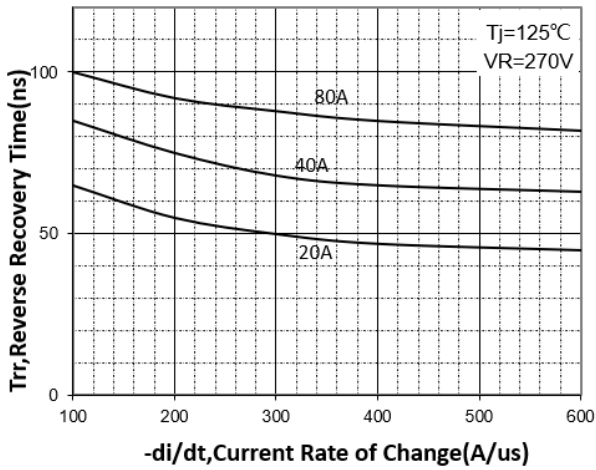
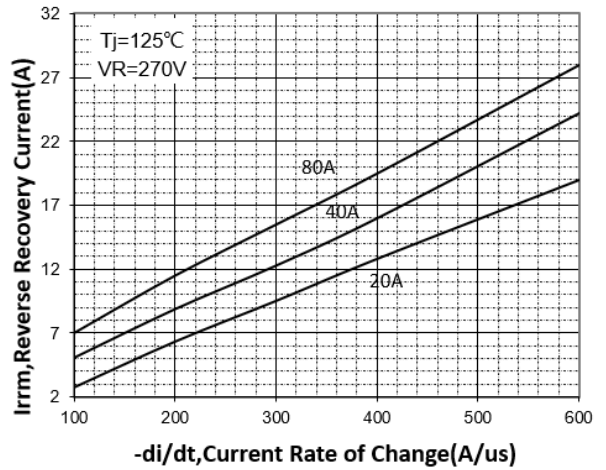


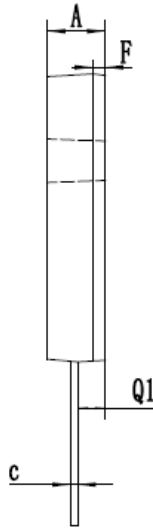
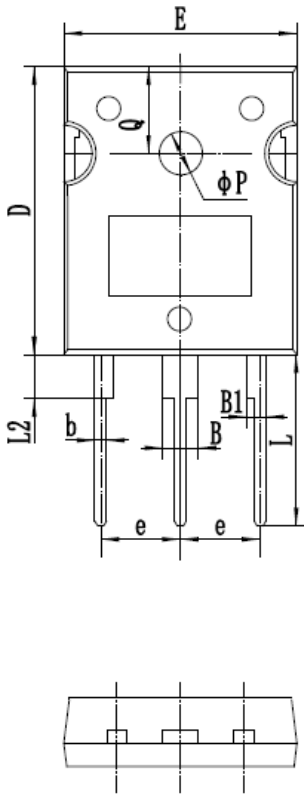
Fig.4 Peak reverse recovery current versus di/dt





TO-247S

单位 Unit: mm



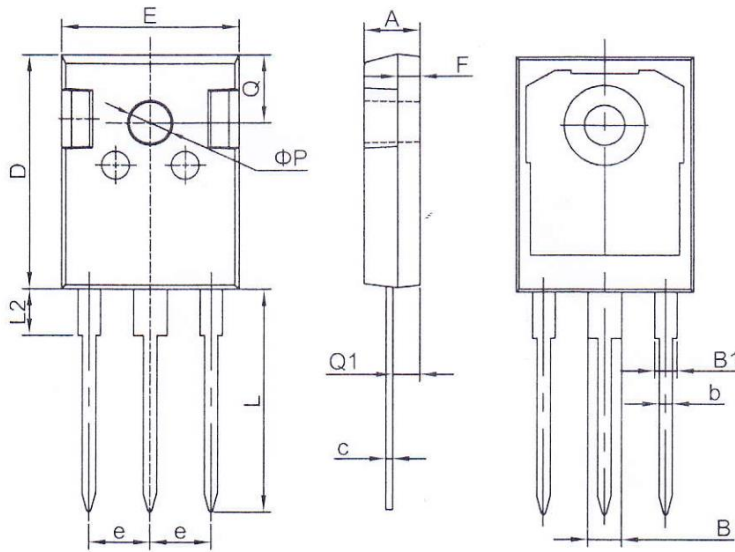
符号 SYMBOL	单位: mm	
	MIN	MAX
A	4.8	5.2
B	2.9	3.3
B1	1.9	2.3
b	1.05	1.35
c	0.35	0.65
D	18	22
E	14	17
e	5.44(TYP)	
F	1.1	1.4
L	13	16
L2	2.5	5.5
Q	5.3	5.7
Q1	2.3	2.7
$\phi P$	3.5	3.7





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

