

# DBF21~DBF210

Rev.A Nov.-2023

## 描述 / Descriptions

2.0A 表面贴装玻璃钝化整流桥，薄型 DBF 封装。

2.0A Surface Mount Glass Passivated Bridge Rectifier, DBF thin package.

## 特征 / Features

玻璃钝化芯片结构，低漏电，浪涌电流大，反向电压：100V~1000V，正向电流：2.0A，适用表面贴装，无卤产品。

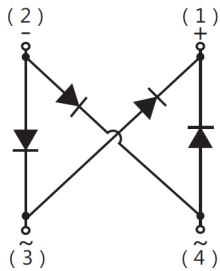
Glass Passivated Die Construction, Low leakage, High Surge Current Capability, Reverse Voltage :100 to 1000V, Forward Current: 2.0A, Designed for Surface Mount Application, HF product.

## 用途 / Applications

一般用途。

General purpose.

## 内部等效电路 / Equivalent Circuit



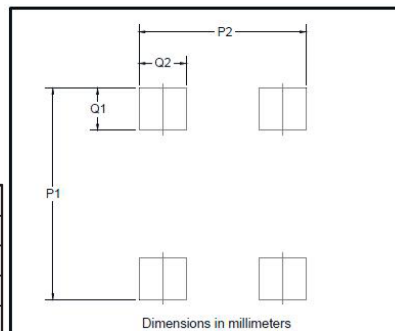
## 引脚排列 / Pinning



### PINNING

PIN	DESCRIPTION
1	Output Anode ( + )
2	Output Cathode ( - )
3	Input Pin ( ~ )
4	Input Pin ( ~ )

### Suggested pad layout



Dim	Min
P1	9.15
P2	7.10
Q1	1.80
Q2	2.00

## 印章代码 / Marking

见印章说明。

See Marking Instructions.

**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating						单位 Unit
		DBF21	DBF22	DBF24	DBF26	DBF28	DBF210	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>DC</sub>	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	70	140	280	420	560	700	V
Average Rectified Output Current <sup>(Note1)</sup> @T=100°C	I <sub>F(AV)</sub>	2.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	75						A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	23.344						A <sup>2</sup> s
Typical Junction Capacitance <sup>(Note 2)</sup>	C <sub>i</sub>	27						pF
Typical Thermal Resistance <sup>(Note 3)</sup>	R <sub>θJA</sub> R <sub>θJC</sub>	50 10						°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55~+150						°C

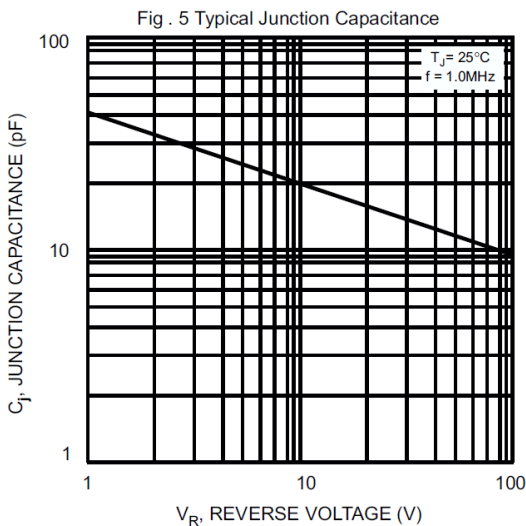
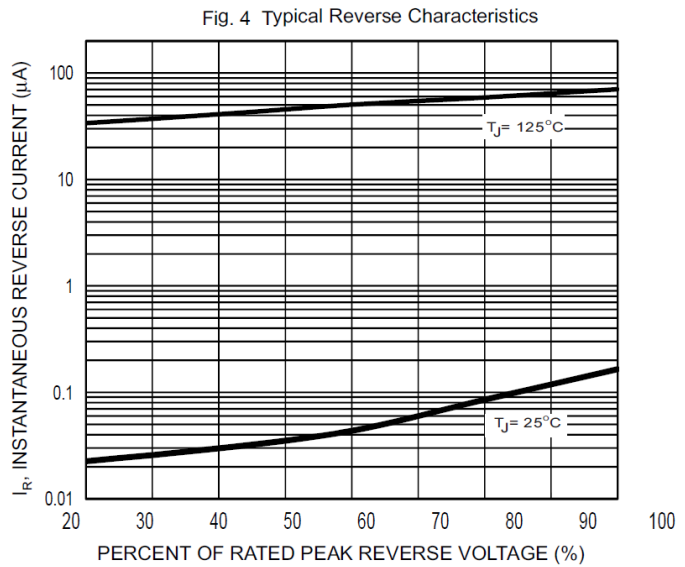
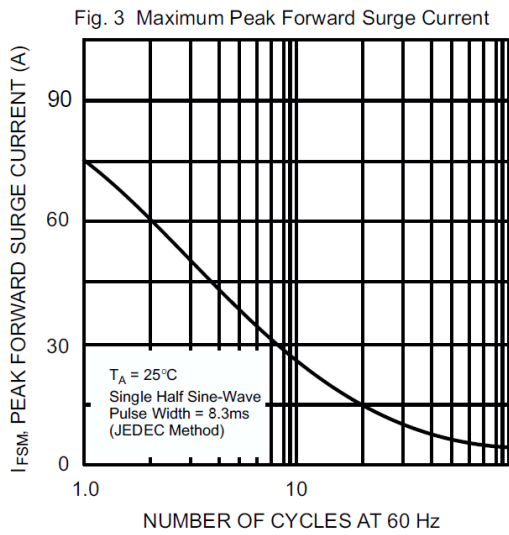
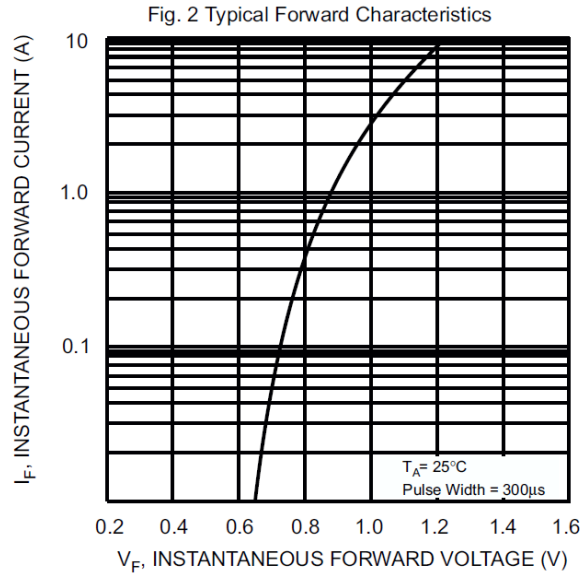
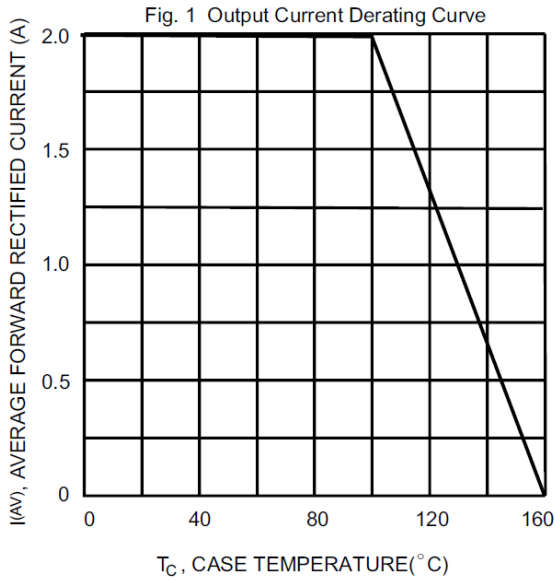
Note:

1. Mounted on glass epoxy PC board with 1.3mm solder pad.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.
3. Mounted on 15mm\*12 mm\*1.6mm AL pad attach 195mm\*110mm\*10mm steel plate.

**电性能参数 / Electrical Characteristics(Ta=25°C)**

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating	单位 Unit
Forward Voltage per element	V <sub>FM</sub>	I <sub>F</sub> =1.0A	0.95	V
		I <sub>F</sub> =2.0A	1.0	
Peak Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	T <sub>j</sub> =25°C	5.0	μA
		T <sub>j</sub> =125°C	100	

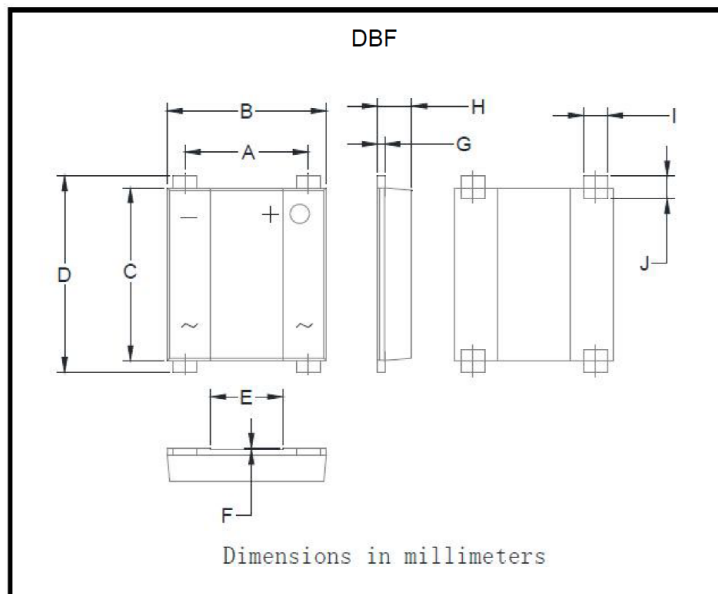
电参数曲线图 / Electrical Characteristic Curve



# DBF21~DBF210

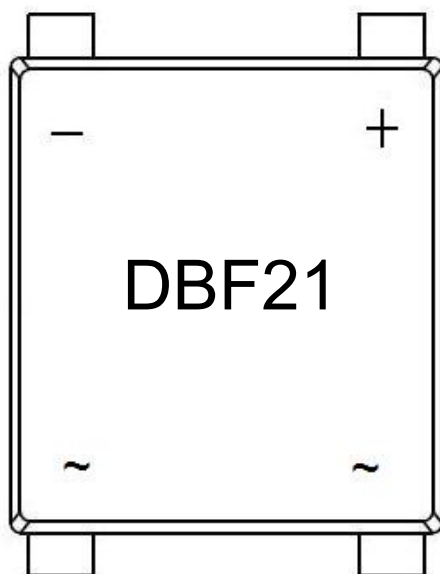
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## 外形尺寸图 / Package Dimensions



DBF		
Dim	Min	Max
A	4.90	5.20
B	6.50	6.70
C	7.20	7.40
D	7.90	8.60
E	2.90	3.10
F	0.04	0.08
G	0.20	0.40
H	1.30	1.50
I	0.95	1.15
J	0.70	1.05

印章说明 / Marking Instructions



说明

DBF21 : 为产品型号

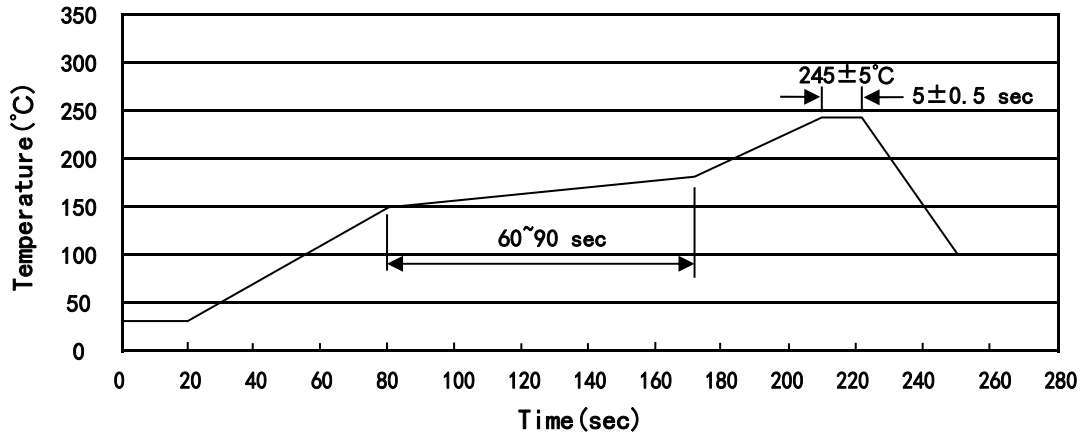
Note:

DBF21 : Product Type

**Marking**

Type number	Marking code
DBF21	DBF21
DBF22	DBF22
DBF24	DBF24
DBF26	DBF26
DBF28	DBF28
DBF210	DBF210

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 150~180°C，时间 60~90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
DBF	3,000	2	6,000	6	36,000	13"×16	337×337×49	380×335×366

使用说明 / Notices