MB1F~MB10F

Rev.D May.-2017

描述 / Descriptions

0.8A 表面贴装玻璃钝化整流桥，薄型 MBF 封装。

0.8A Surface Mount Glass Passivated Bridge Rectifier，MBF thin package。

特征 / Features

玻璃钝化芯片，反向电压：100V~1000V，正向电流：0.8A，浪涌电流大，适用于表面贴装。无卤产品。

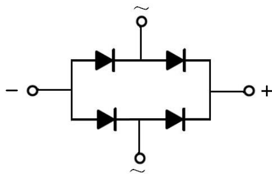
Glass Passivated Chip Junction, Reverse Voltage:100to1000V, Forward Current:0.8 A, High Surge Current Capability, Designed for Surface Mount Application.Halogen free product.

用途 / Applications

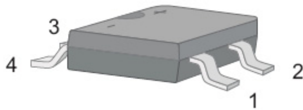
一般用途.

General purpose.

内部等效电路 / Equivalent Circuit

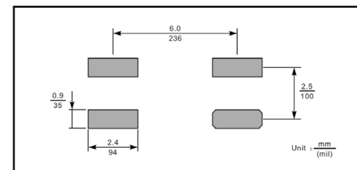


引脚排列 / Pinning



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

The recommended mounting pad size



印章代码 / Marking

见印章说明。See Marking Instructions.

极限参数 / Absolute Maximum Ratings(Ta=25℃)

参数 Parameter	符号 Symbol	数值 Rating						单位 Unit
		MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current at Ta = 50℃	$I_{F(AV)}$	0.8						A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30						A
Typical Junction Capacitance[1)	C_j	13						pF
Typical Thermal Resistance[2)	$R_{θJA}$	95						℃/W
	$R_{θJL}$	30						℃/W
Operating and Storage Temperature Range	T_j ,T_{stg}	-55~+150						℃

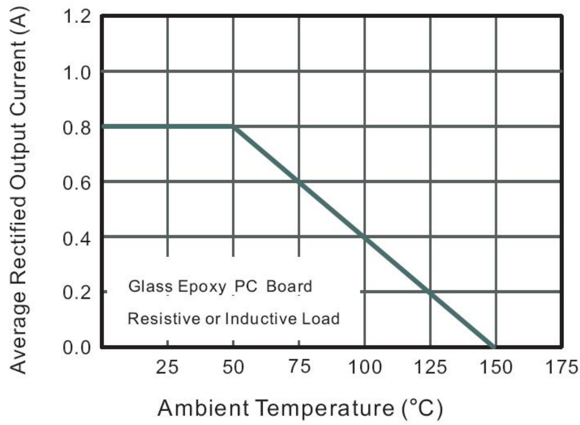
Note:

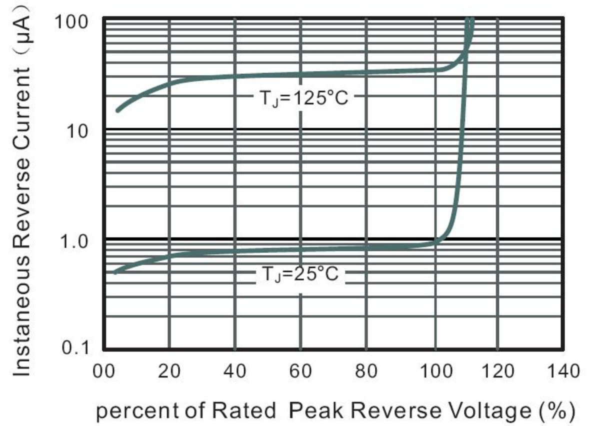
1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with 4×(5×5mm^2） copper pad.

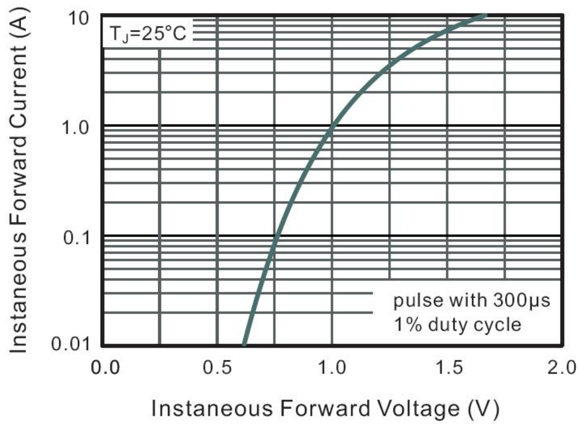
电性能参数 / Electrical Characteristics(Ta=25℃)

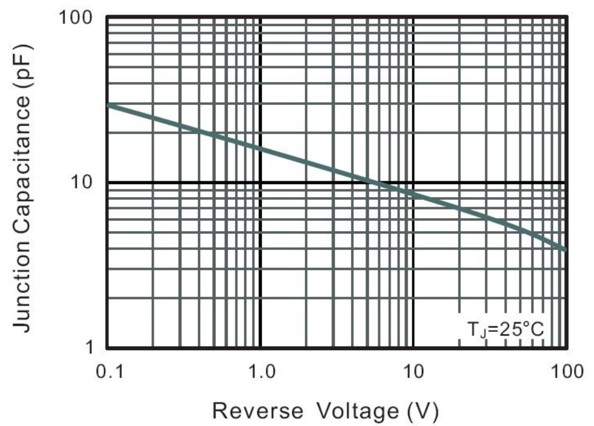
参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating	单位 Unit
Max Instantaneous Forward Voltage	V_F	I_F=0.8A	1.1	V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I_R	T_a=25℃	5.0	μA
		T_a=125℃	40	μA

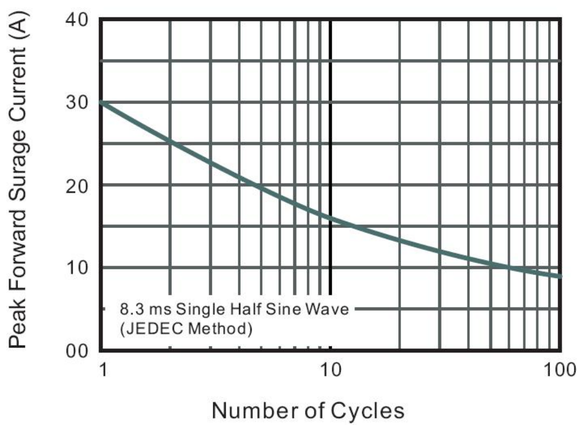
电参数曲线图 / Electrical Characteristic Curve





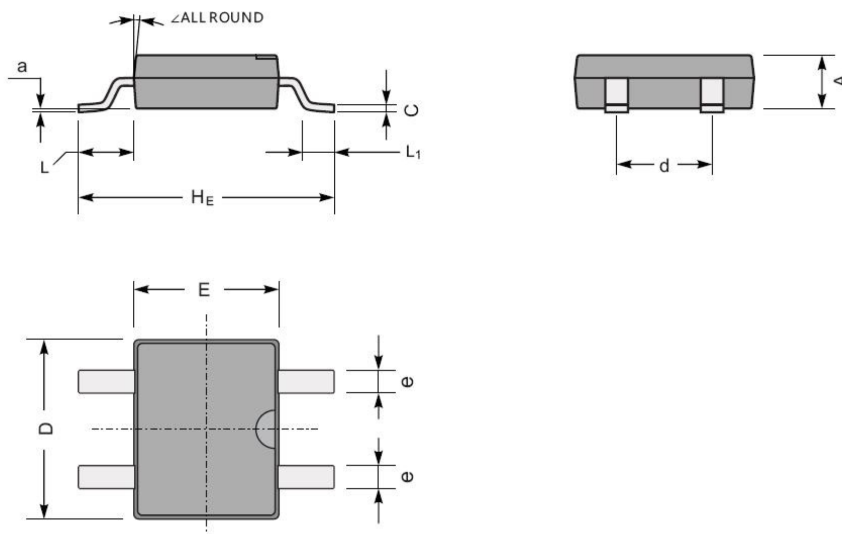






外形尺寸图 / Package Dimensions

MBF

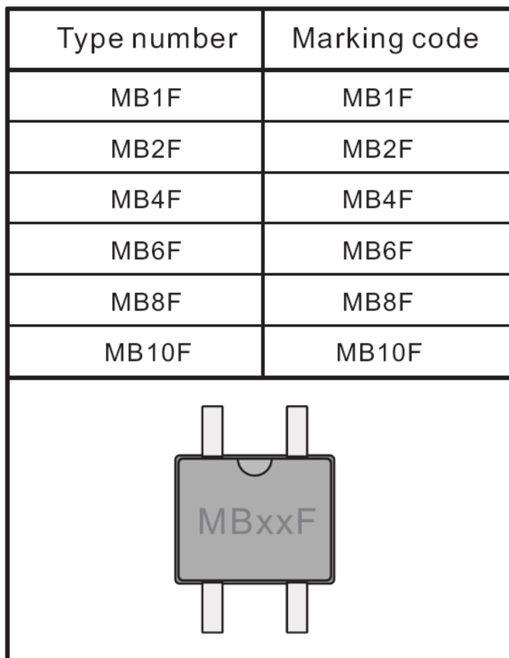


MBF mechanical data

UNIT		A	C	D	E	H_E	d	e	L	L_1	a	∠
mm	max	1.6	0.22	5.0	4.1	7.0	2.7	0.7	1.7	1.1	0.2	7°
	min	1.2	0.15	4.5	3.6	6.4	2.3	0.5	1.3	0.5	—	
mil	max	63	8.7	197	161	276	106	28	67	43	8	
	min	47	5.9	177	142	252	91	20	51	20	—	

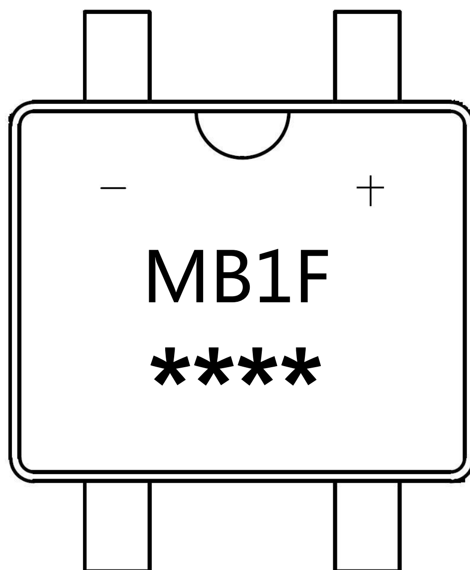
印章说明 / Marking Instructions

Marking



Type number	Marking code
MB1F	MB1F
MB2F	MB2F
MB4F	MB4F
MB6F	MB6F
MB8F	MB8F
MB10F	MB10F

印章说明 / Marking Instructions



说明

MB1F： 为型号代码

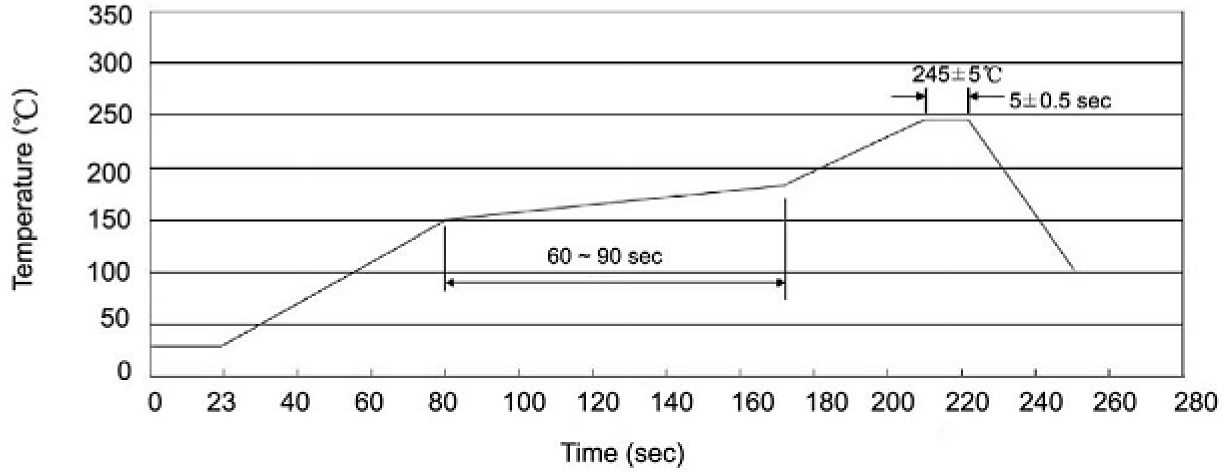
**** ： 为生产批号追溯码，第 1 个*为年月代码，后面 3 个*为当月小批号代码

Note:

MB1F： Product Type Code

****： Lot No. Code，The 1st * means:YM Code，The last 3 * means:little Lot No Code

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 25 ~ 150℃，时间 60 ~ 90sec;

2、峰值温度 245±5℃，时间持续为 5±0.5sec;

3、焊接制程冷却速度为 2 ~ 10℃/sec.

Note:

1.Preheating:25~150℃, Time:60~90sec.

2.Peak Temp.:245±5℃, Duration:5±0.5sec.

3. Cooling Speed: 2~10℃/sec.

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

温度：260±5℃ 时间：10±1 sec.

Temp.:260±5℃ 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^3)		
	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
MBF	5000	2	10000	5	50000	13″ ×15	336X336X40	380X335X366

使用说明 / Notices