

MB24F~MB220F

Rev.E Jan.-2021

描述 / Descriptions

2.0A 表面贴装肖特基桥，薄型 MBF 封装。

2.0A Surface Mount Schottky Bridge, MBF thin package.

特征 / Features

浪涌电流大，反向电压：40V~200V，正向电流：2.0A，适用于表面贴装。无卤产品。

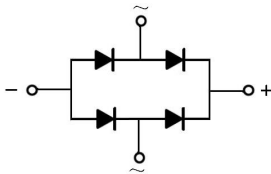
High Surge Current Capability, Reverse Voltage: 40 to 200V, Forward Current: 2.0A, Designed for Surface Mount Application. Halogen free product.

用途 / Applications

一般用途。

General purpose.

内部等效电路 / Equivalent Circuit

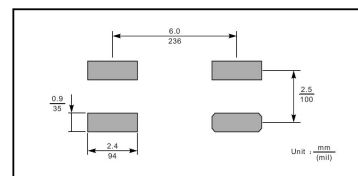


引脚排列 / Pinning



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°C)

参数 Parameter	符号 Symbol	数值 Rating					单位 Unit
		MB24F	MB26F	MB28F	MB210F	MB220F	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	60	80	100	200	V
Maximum RMS Voltage	V_{RMS}	28	42	56	70	140	V
Maximum DC Blocking Voltage	V_{DC}	40	60	80	100	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0					A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50		40			A
Typical Junction Capacitance ¹⁾	C_j	220	80				pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	75					°C/W
Operating Junction Temperature Range	T_j	-55~+125					°C
Storage Temperature Range	T_{stg}	-55~+150					°C

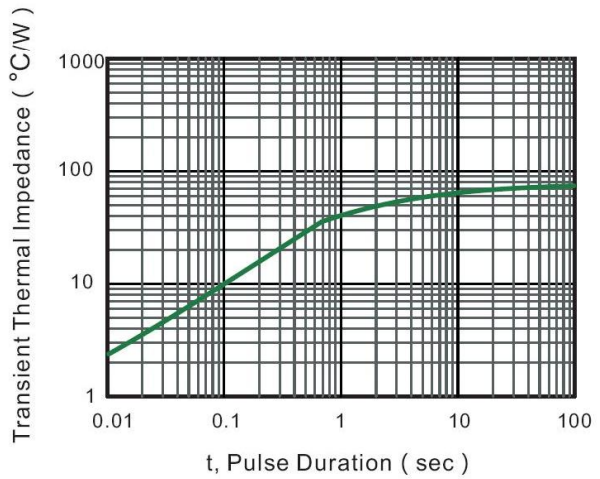
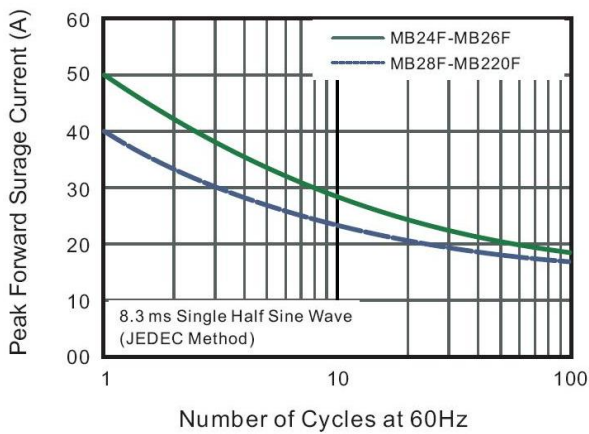
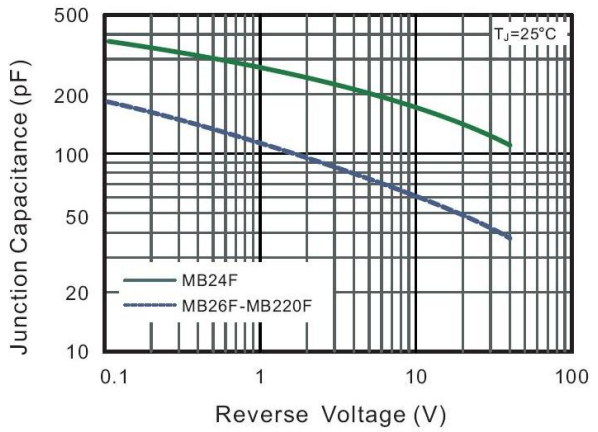
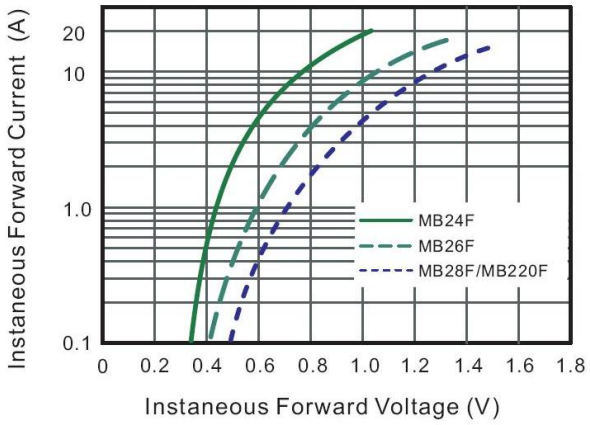
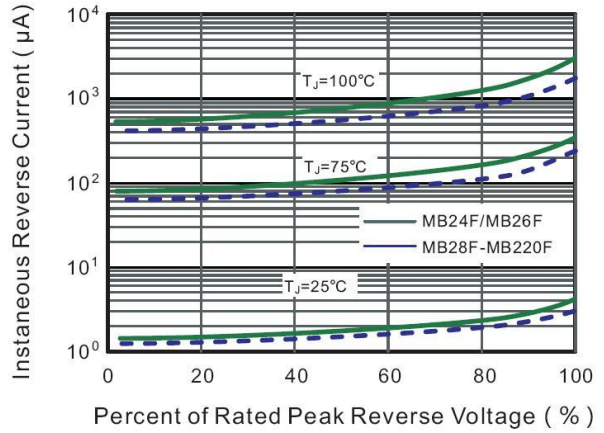
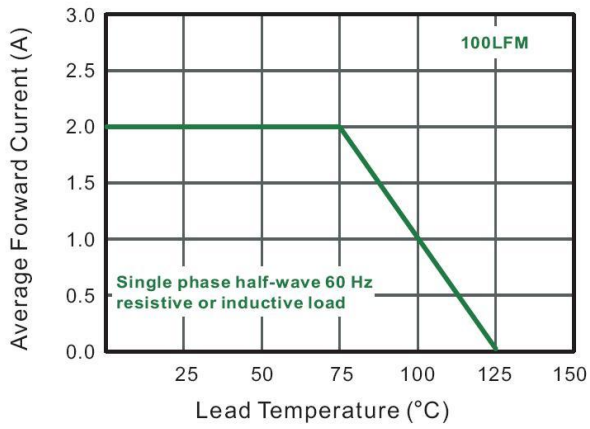
Note:

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

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

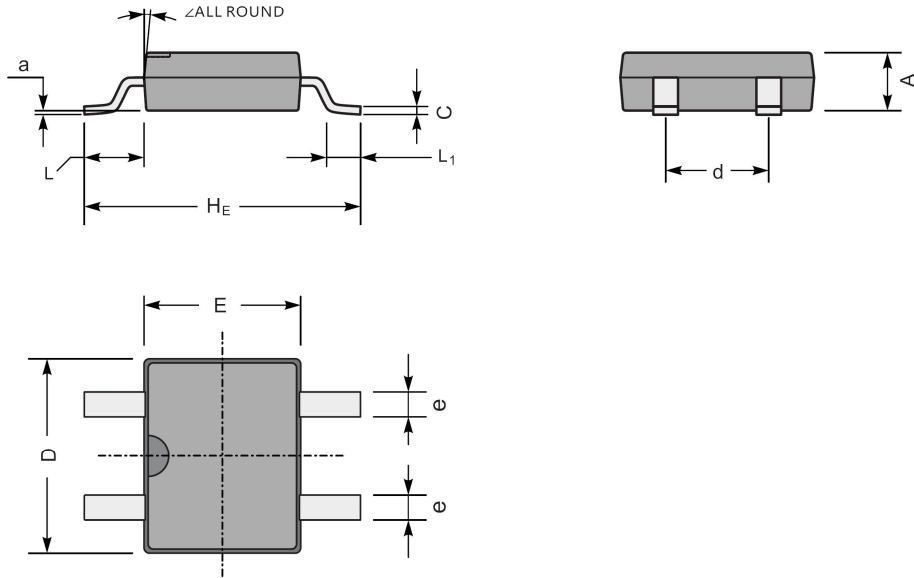
参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating					单位 Unit
			MB24F	MB26F	MB28F	MB210F	MB220F	
Max Instantaneous Forward Voltage	V_F	$I_F=2.0A$	0.55	0.70	0.85		V	
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I_R	$T_a=25^\circ C$	0.5		0.3		mA	
		$T_a=100^\circ C$	10		5.0		mA	

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

MBF

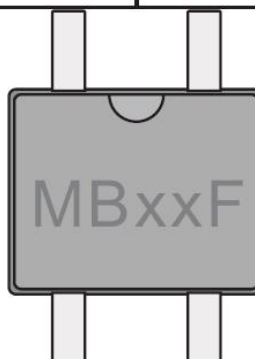


MBF mechanical data

UNIT		A	C	D	E	H_E	d	e	L	L_1	a	\angle
mm	max	1.6	0.22	5.0	4.1	7.0	2.7	0.8	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	31	67	43	8	
	min	47	5.9	177	142	252	91	20	51	20	—	

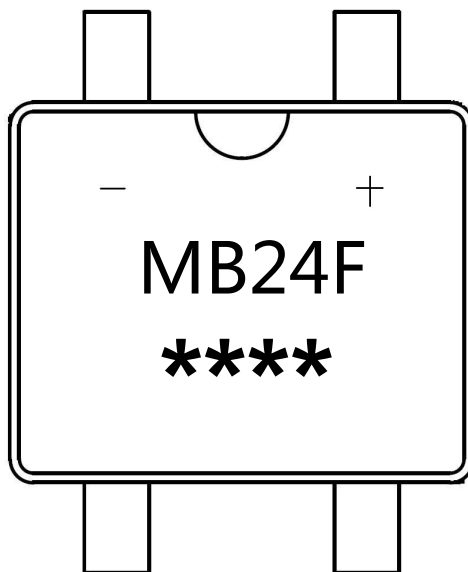
Marking

Type number	Marking code
MB24F	MB24F
MB26F	MB26F
MB28F	MB28F
MB210F	MB210F
MB220F	MB220F



The diagram shows a rectangular component with four pins (two on top, two on bottom). A semi-circular notch is located at the top center of the component. The marking code "MBxxF" is printed in the center of the component's body.

印章说明 / Marking Instructions



说明

MB24F : 为型号代码

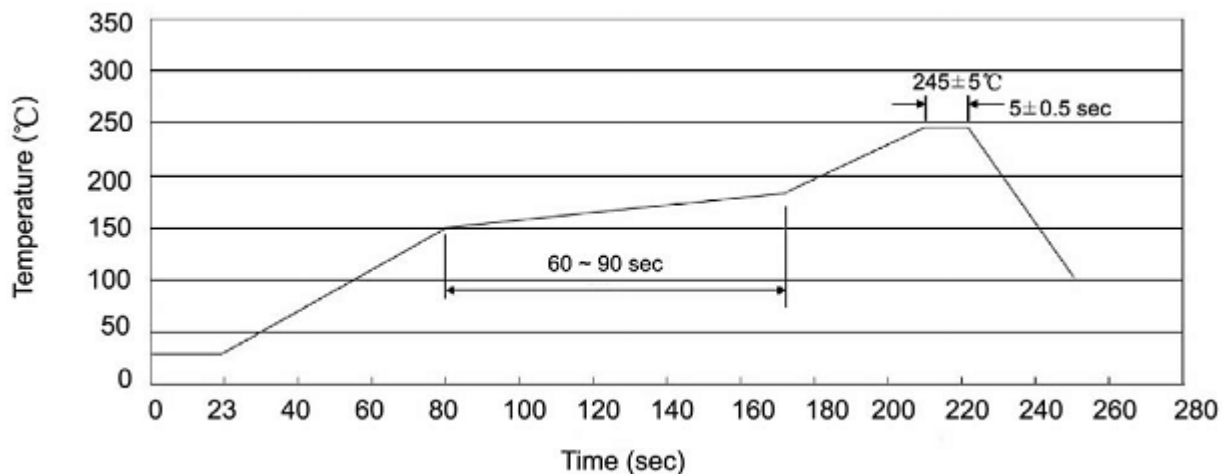
**** : 为生产批号追溯码, 第1个*为年月代码, 后面3个*为当月小批号代码

Note:

MB24F : 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 $25 \sim 150^\circ\text{C}$ ，时间 $60 \sim 90\text{sec}$ ；
- 2、峰值温度 $245 \pm 5^\circ\text{C}$ ，时间持续为 $5 \pm 0.5\text{sec}$ ；
- 3、焊接制程冷却速度为 $2 \sim 10^\circ\text{C}/\text{sec}$ 。

Note:

- 1.Preheating: $25 \sim 150^\circ\text{C}$ ，Time: $60 \sim 90\text{sec}$ 。
- 2.Peak Temp.: $245 \pm 5^\circ\text{C}$ ，Duration: $5 \pm 0.5\text{sec}$ 。
3. Cooling Speed: $2 \sim 10^\circ\text{C}/\text{sec}$ 。

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

温度： $260 \pm 5^\circ\text{C}$

时间： 10 ± 1 sec.

Temp.: $260 \pm 5^\circ\text{C}$

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 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	7	70000	13" × 12	336X336X40	380X335X366

使用说明 / Notices