MB24F~MB220F

Rev.C Feb.-2015

DATA SHEET

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.

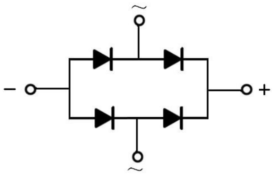
特征 / Features

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:40to200V,Forward Current:2.0A,Designed for Surface Mount Application.Halogen free product.

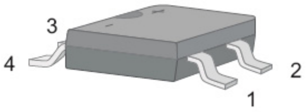
用途 / Applications

一般用途.
General purpose.

内部等效电路 / Equivalent Circuit

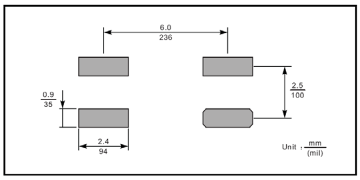


引脚排列 / Pinning



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℃)

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]	$R_{θJA}$	75					℃/W
Operating Junction Temperature Range	T_j	-55~+125					℃
Storage Temperature Range	T_{stg}	-55~+150					℃

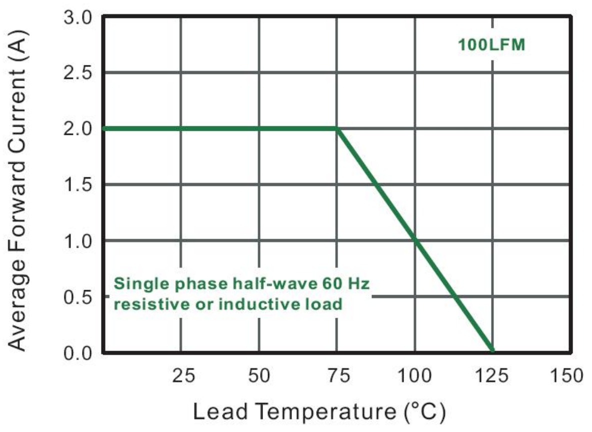
Note:

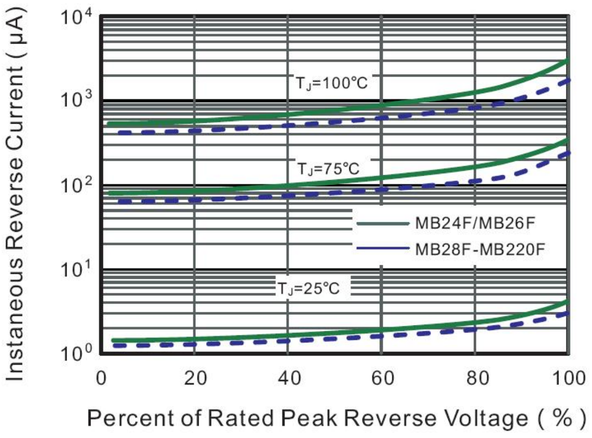
1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with 4×(5×5mm^2） copper pad.

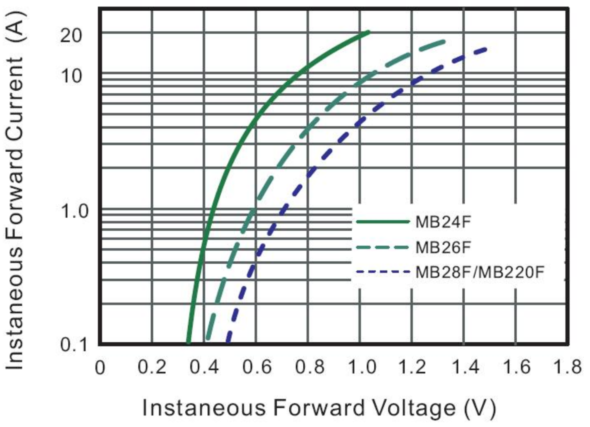
电性能参数 / Electrical Characteristics(Ta=25℃)

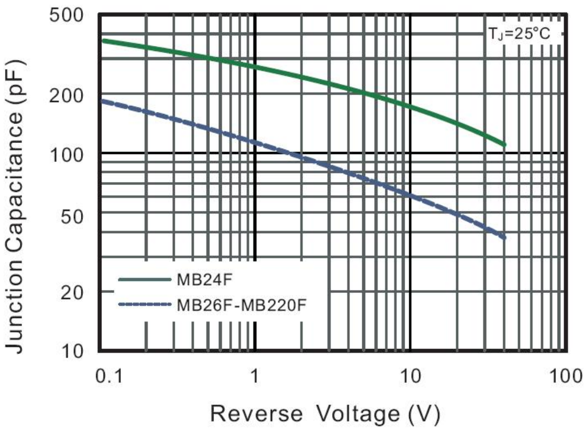
参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating					单位 Unit
			MB24F	MB26F	MB28F	MB210F	MB220F	
Max Instantaneous Forward Voltage	V_F	I_F=2.0A	0.55	0.70	0.85			V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I_R	T_a=25℃	0.5			0.3		mA
		T_a=100℃	10			5.0		mA

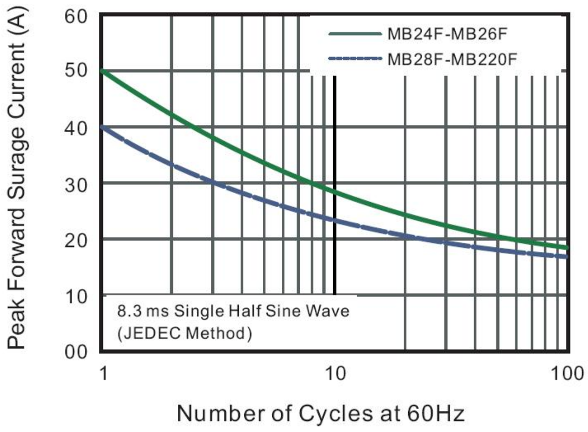
电参数曲线图 / Electrical Characteristic Curve

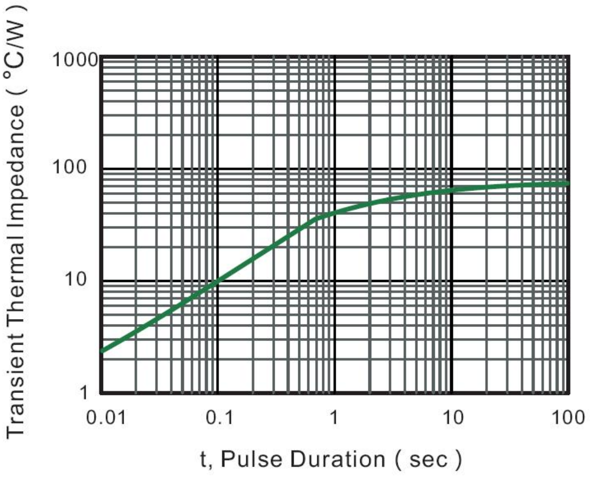






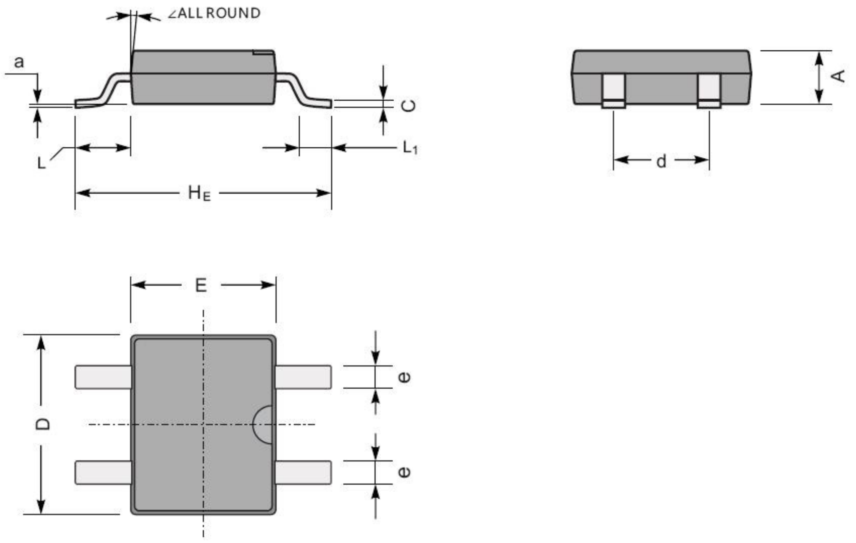






外形尺寸图 / Package Dimensions

MBF



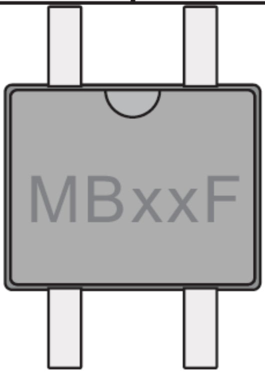
MBF mechanical data

UNIT		A	C	D	E	H_E	d	e	L	L_1	a	∠
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	—	

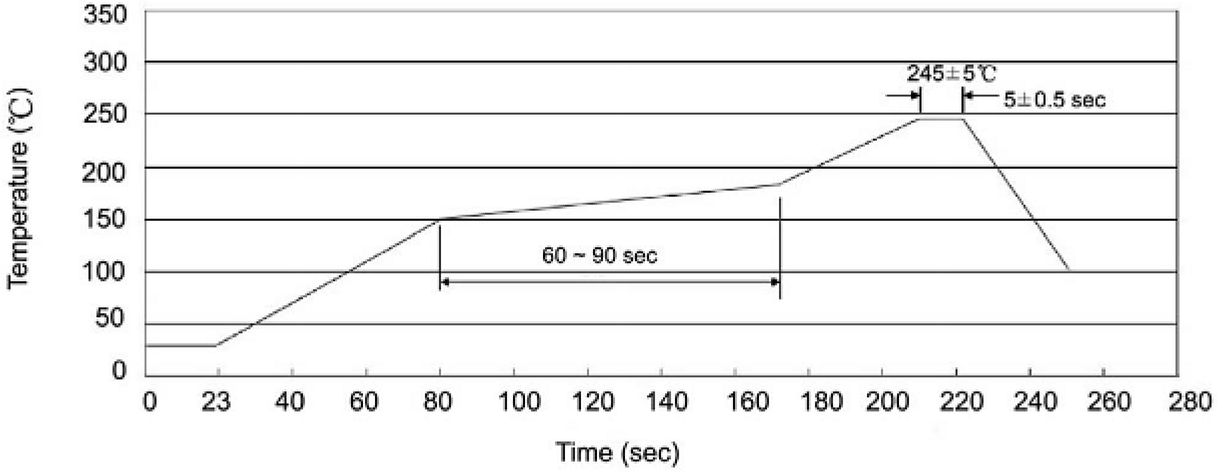
印章说明 / Marking Instructions

Marking

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



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	345X345X235

使用说明 / Notices