

MB05F10-34~MB10F10-34

Rev.A Nov.-2025

描述 / Descriptions

1A 表面贴装玻璃钝化整流桥，薄型 MBF 封装。

1A Surface Mount Glass Passivated Bridge Rectifier, MBF thin package.

特征 / Features

玻璃钝化芯片，反向电压：50V~1000V，正向电流：1A，浪涌电流大，低正向压降，引线 and 管体皆符合 RoHS 标准，无卤产品。

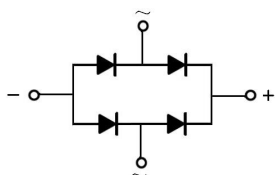
Glass Passivated Chip Junction, Reverse Voltage:50to1000V, Forward Current:1 A, High Surge Current Capability, Low Forward Voltage Drop, Lead and body according with RoHS standard, Halogen free product.

用途 / Applications

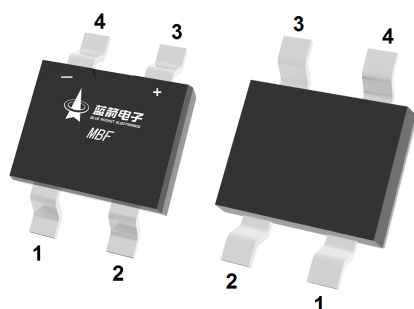
一般用途。

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 (-)

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
		MB05F 10-34	MB1F 10-34	MB2F 10-34	MB4F 10-34	MB6F 10-34	MB8F 10-34	MB10F 10-34	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (Note 1) @T _A =40 °C	I _{F(AV)}	1							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}	30							A
I ² t Rating for Fusing(t<8.3ms)	I ² _t	3.7							A ² s
Typical Junction Capacitance Per Element (Note2)	C _j	13							pF
Typical Thermal Resistance (Note3)	R _{θJA}	60							°C/W
	R _{θJL}	16							
Operating and Storage Temperature Range	T _j ,T _{stg}	-55 to +150							°C

NOTES:

- 1.Mounted on P.C. board.
- 2.Measured at1.0MHz and applied reverse voltage of 4.0V DC.
- 3.Thermal resistance junction to case

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
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°C	5.0	μA
		T _a =125°C	100	μA

电参数曲线图 / Electrical Characteristic Curve

FIG.1-FORWARD CURRENT DERATING CURVE

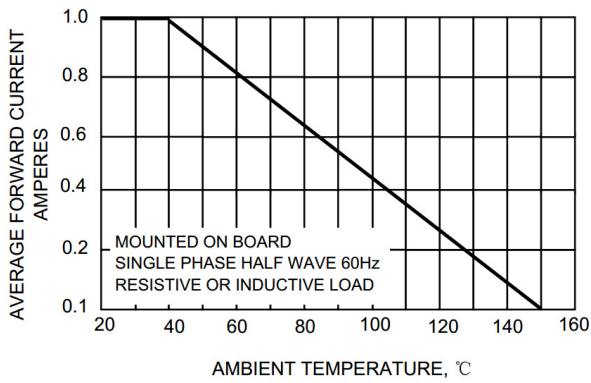


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

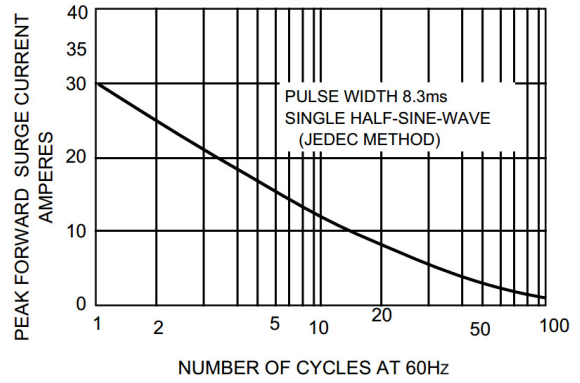


FIG.3-TYPICAL REVERSE CHARACTERISTICS

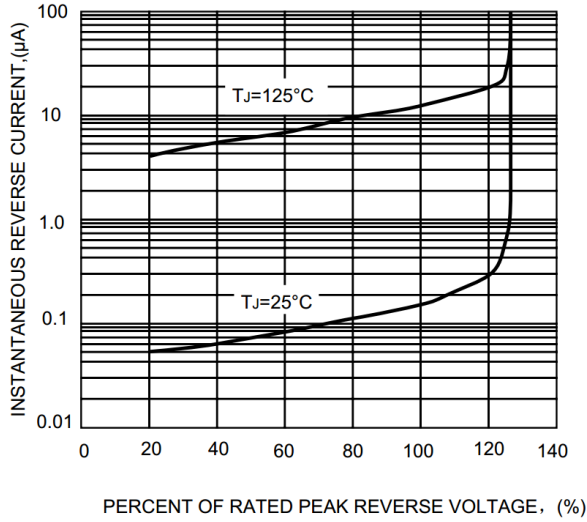


FIG.4-TYPICAL FORWARD CHARACTERISTICS

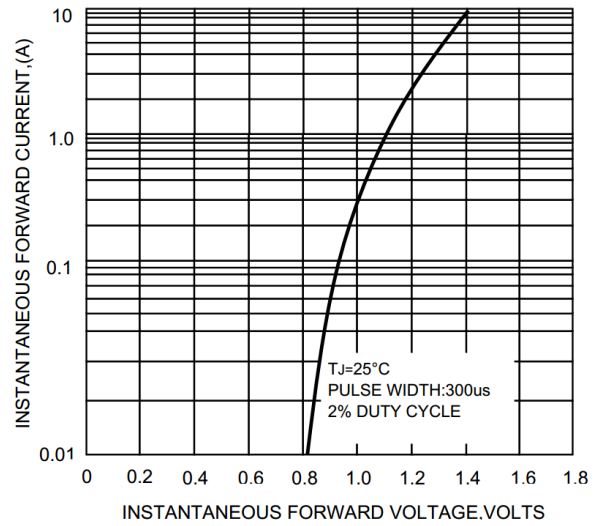
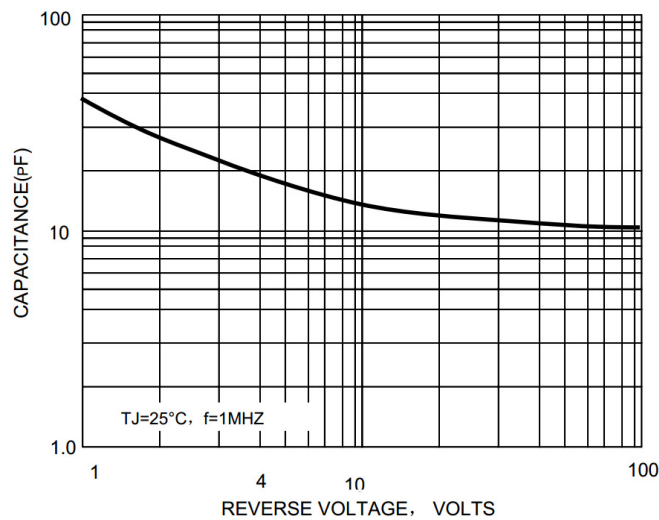
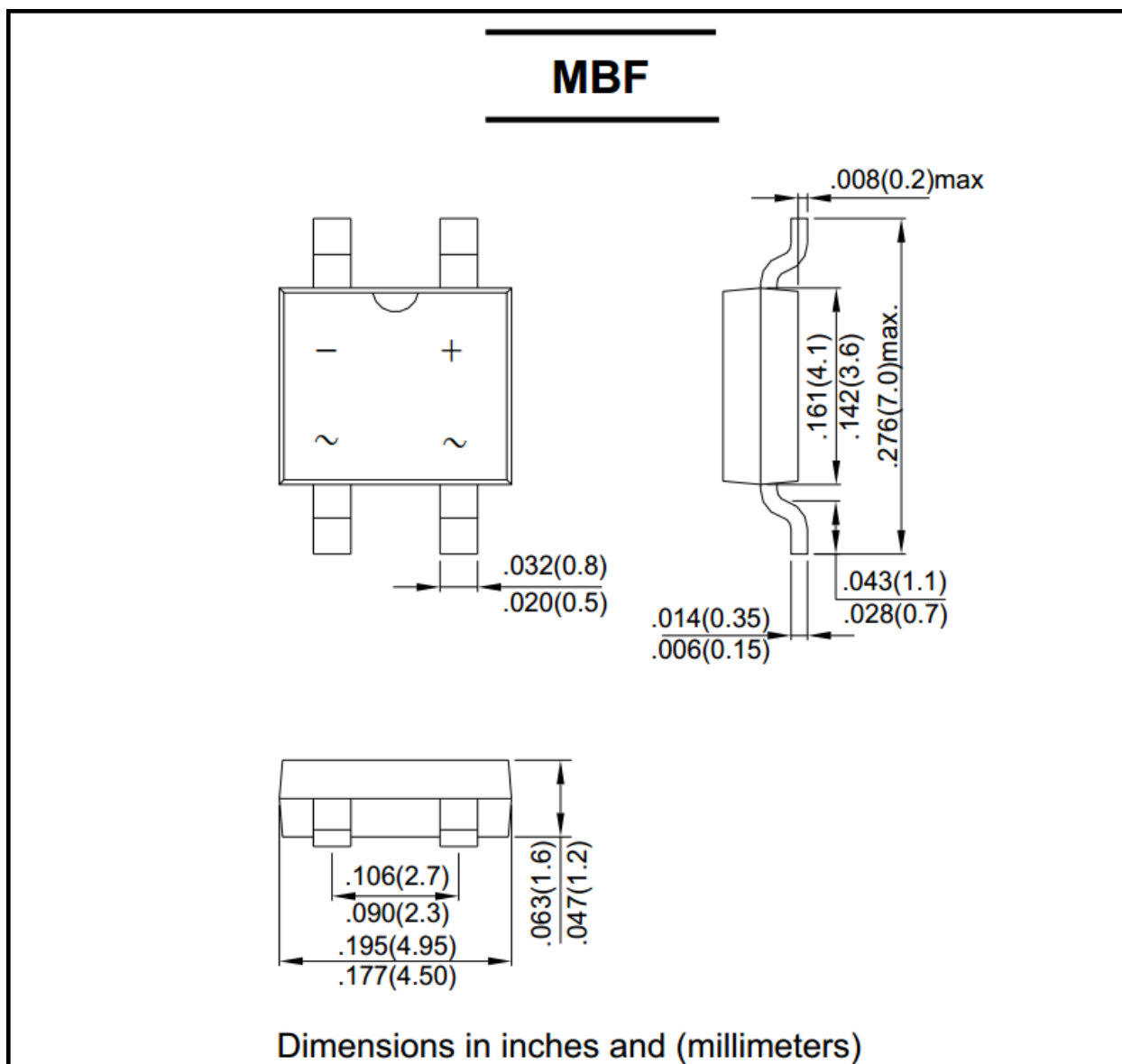


FIG.5-TYPICAL JUNCTION CAPACITANCE



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



说明

MB05F : 为型号代码
**** : 为生产批号代码，随生产批号变化

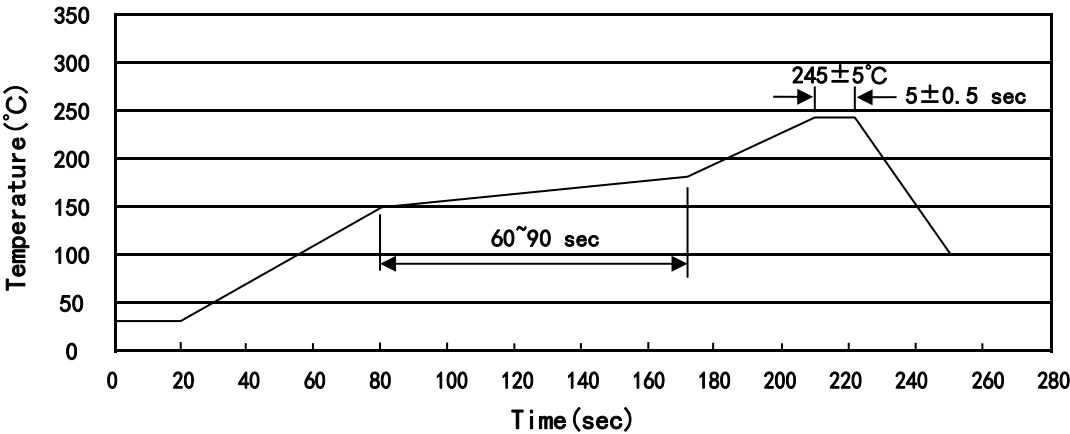
Note:

MB05F : Product Type Code
**** : Lot No. Code, code change with Lot No.

Marking

Type number	Marking code
MB05F10-34	MB05F
MB1F10-34	MB1F
MB2F10-34	MB2F
MB4F10-34	MB4F
MB6F10-34	MB6F
MB8F10-34	MB8F
MB10F10-34	MB10F

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℃，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:150~180℃, 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	5,000	2	10,000	7	70,000	13" ×12	336×336×40	380×335×366

使用说明 / Notices