

MB05S~MB10S

Rev. A Apr.-2021

描述 / Descriptions

1A 表面贴装玻璃钝化整流桥，MBS 封装。

1A Surface Mount Glass Passivated Bridge Rectifier, MBS package.

特征 / Features

玻璃钝化芯片，反向电压：50V~1000V，正向电流：1A，正向浪涌承受能力强，低正向压降，引线和管体皆符合 RoHS 标准，无卤产品。

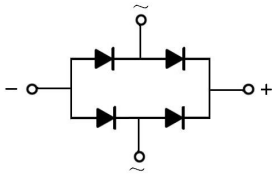
Glass Passivated Die Construction, Reverse Voltage: 50to1000V, Forward Current: 1A, High Forward surge capability, Low Forward Voltage Drop, Lead and body according with RoHS standard, Halogen free product.

用途 / Applications

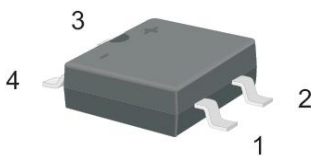
一般用途。

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.

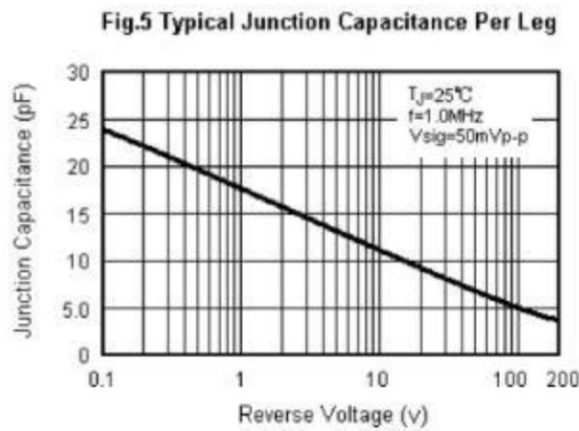
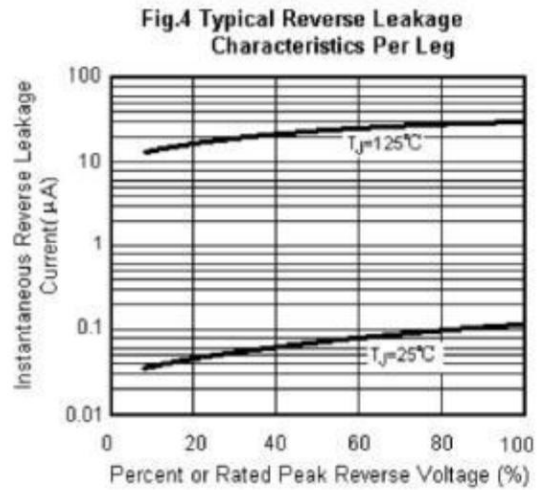
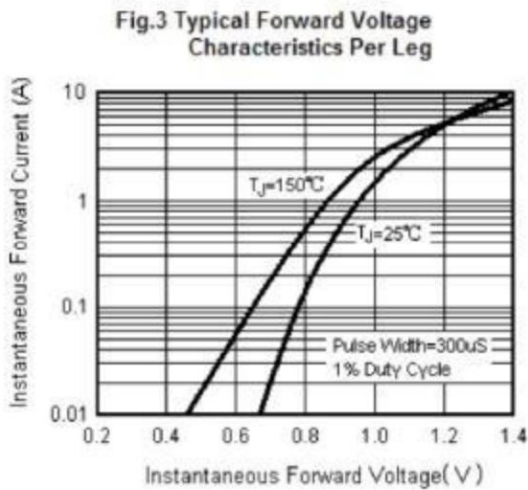
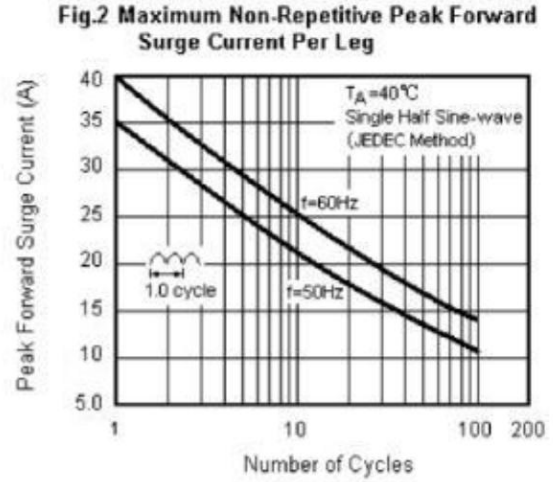
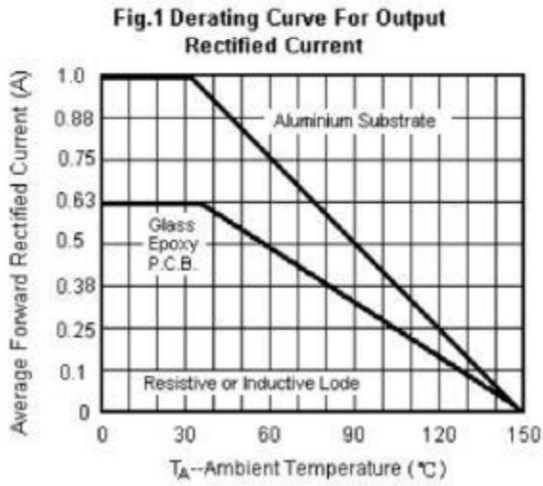
极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating							单位 Unit
		MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	
Maximum Repetitive 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@Ta=40°C	$I_{(AV)}$	1							A
Peak Forward Surge Current,8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	40							A
I^2t Rating for Fusing(t<8.3ms)	I^2t	6.5							A ² s
VR=4.0V,f=1MHZ Typical Junction Capacitance	C_j	13							pF
Typical Thermal Resistance	$R_{\theta JA}$	60							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							°C

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

参数 Parameter	符号 Symbol	测试条件 Test condition	数值 Rating	单位 Unit
Maximum Forward Voltage	V_F	$I_F=0.5A$	1.0	V
Maximum Reverse Current	I_R	$T_a=25^\circ C$	5.0	μA
		$T_a=125^\circ C$	500	

电参数曲线图 / Electrical Characteristic Curve

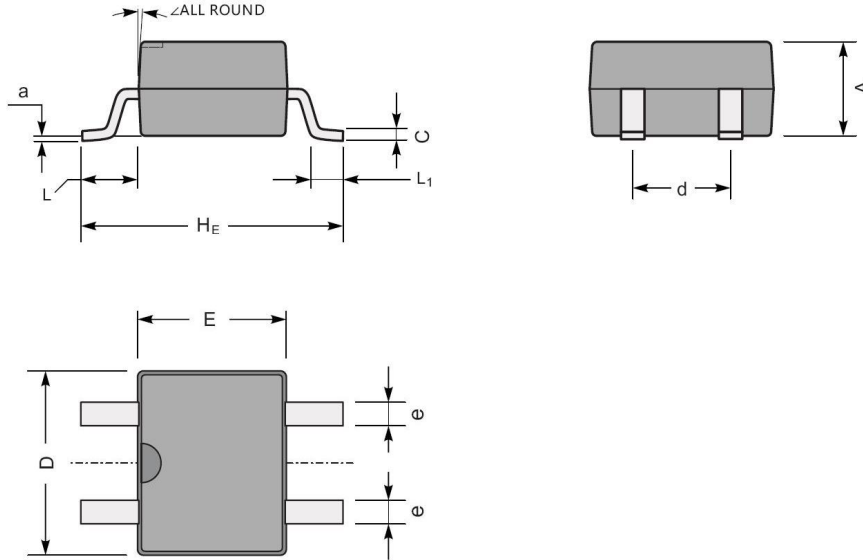


MB05S~MB10S

Rev. A Apr.-2021

外形尺寸图 / Package Dimensions

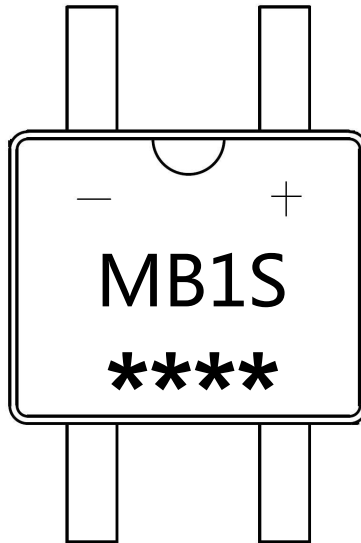
MBS



MBS mechanical data

UNIT		A	C	D	E	H _E	d	e	L	L ₁	a	∠
mm	max	2.6	0.22	5.0	4.1	7.0	2.7	0.7	1.7	1.1	0.2	7°
	min	2.2	0.15	4.5	3.6	6.4	2.3	0.5	1.3	0.5	—	
mil	max	102	8.7	197	161	276	106	28	67	43	8	
	min	94	5.9	177	142	252	91	20	51	20	—	

印章说明 / Marking Instructions



说明：

MB1S： 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:

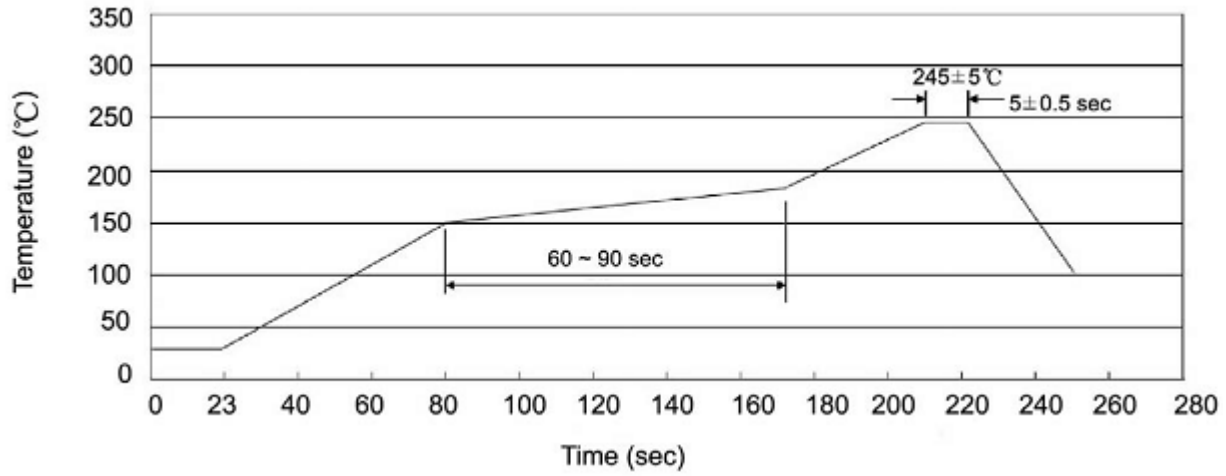
MB1S： Product Type Code

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

Marking

Type number	Marking code
MB05S	MB05S
MB1S	MB1S
MB2S	MB2S
MB4S	MB4S
MB6S	MB6S
MB8S	MB8S
MB10S	MB10S

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
MBS	3000	2	6000	7	42000	13" × 12	336X336X40	380X335X366

使用说明 / Notices