

MB24S~MB220S

Rev.A Mar.-2021

描述 / Descriptions

2A 表面贴装肖特基整流桥，MBS 封装。
2A surface mount schottky bridge, MBS package.

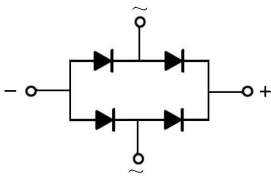
特征 / Features

反向电压：40V~200V，正向电流：2A，浪涌电流大，适用于表面贴装，无卤产品。
Reverse Voltage: 40 to 200V, Forward Current: 2 A, High Surge Current Capability, Designed for Surface Mount Application, Halogen free product.

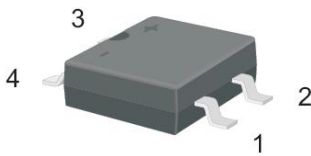
用途 / Applications

一般用途。
General purpose.

内部等效电路 / Equivalent Circuit

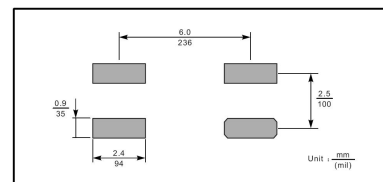


引脚排列 / Pinning



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°C)

参数 Parameter	符号 Symbol	数值 Rating					单位 Unit
		MB24S	MB26S	MB28S	MB210S	MB220S	
Maximum Repetitive 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 at Tc = 90°C	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	C _j	220	80				pF
Typical Thermal Resistance 2)	R _{θJA}	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 4×1.5"×1.5" (3.81×3.81cm) copper pad.

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
			MB24S	MB26S	MB28S	MB210S	MB220S	
Maximum Forward Voltage	V _F	I _F =2A	0.55	0.7	0.85			V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I _R	T _a =25°C T _a =100°C	0.5 10		0.3 5			mA

电参数曲线图 / Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

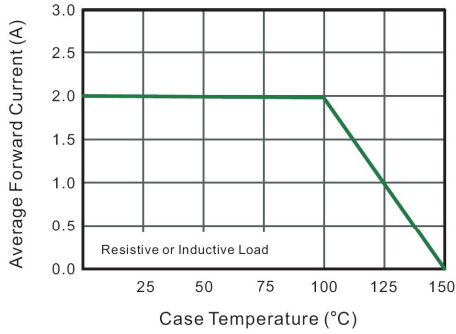


Fig.2 Typical Reverse Characteristics

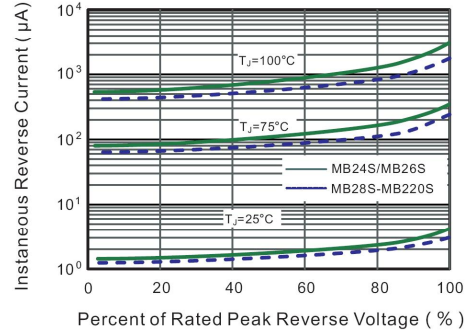


Fig.3 Typical Forward Characteristic

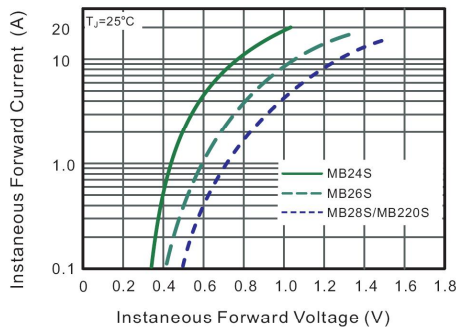


Fig.4 Typical Junction Capacitance

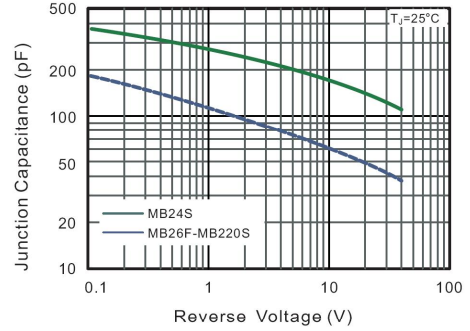


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

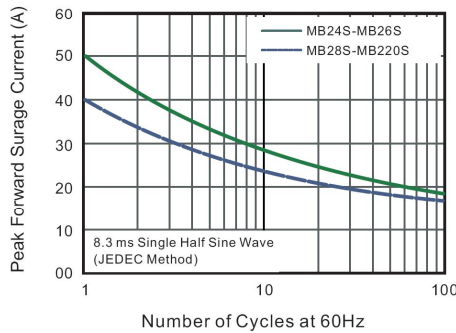
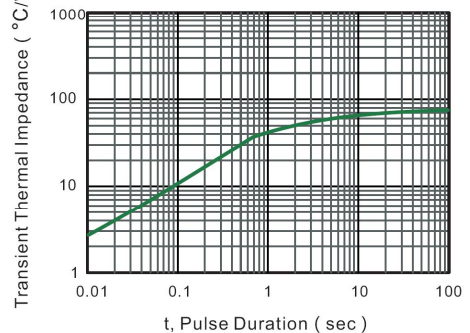
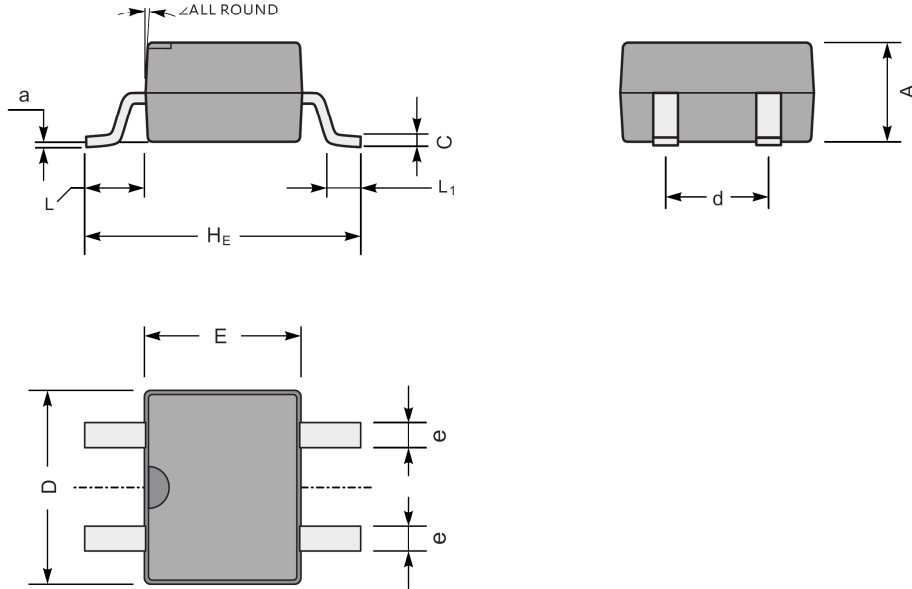


Fig.6- Typical Transient Thermal Impedance



外形尺寸图 / Package Dimensions

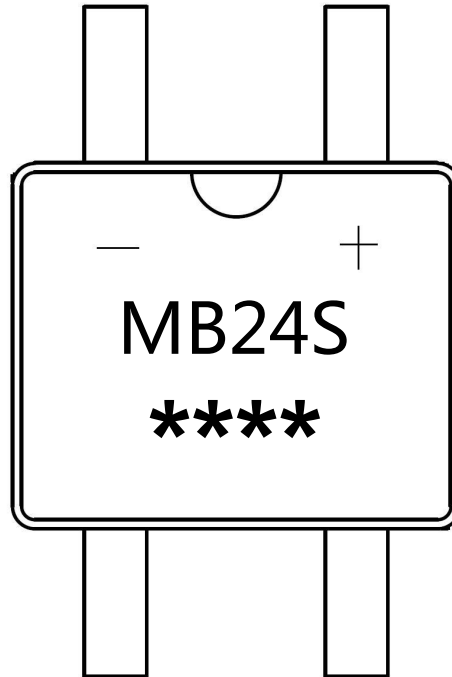
MBS



MBS mechanical data

UNIT		A	C	D	E	H_E	d	e	L	L_1	a	\angle
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：

MB24S：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:

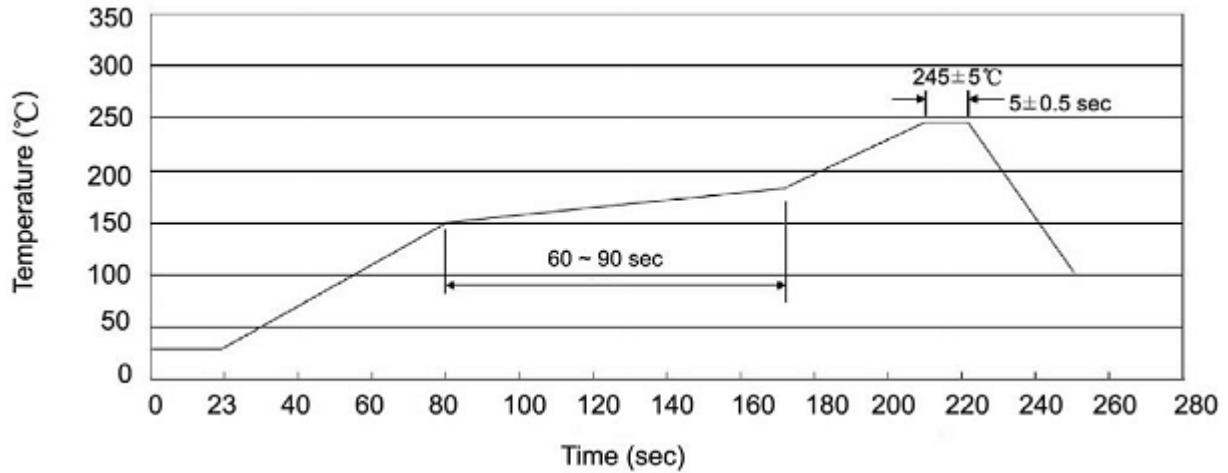
MB24S：Product Type Code

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

Marking

Type number	Marking code
MB24S	MB24S
MB26S	MB26S
MB28S	MB28S
MB210S	MB210S
MB220S	MB220S

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°C，时间 60 ~ 90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:25~150°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

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

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°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