

客户 Customer: _____

日期 DATE: _____

纳入仕様书

SPECIFICATION

产 品 名 称 PRODUCT NAME: 声表双工器

SAW Duplexer

贵 司 料 号 YOUR PART NO.: _____

敝 司 料 号 OUR PART NO.: MS18U847M-DU20S

版本 号 VERSION.: V1.0

接受 RECEPTION

THE SPECIFICATION HAS BEEN ACCEPTED.

该纳入仕様书已被我司接受

日期:

DATE:

公司:
COMPANY:批准
CFMD审核
CHKD接收
RCVD

深圳市麦捷微电子科技股份有限公司
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CFMD. 批准	CHKD. 审核	DSGD. 担当
赖定权	赖定权	吴继航

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纳入仕様书改定履历

MODIFY HISTORY OF SPECIFICATION

NO.	修改日期/DATE	修改内容/CONTENT	批准/APPROVED
1.0	2019.10.15	初稿 /New Released	赖定权

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1 适用范围 Scope

麦捷声表滤波器系列产品设计用于 WIFI、GPS、移动电话和无绳电话机等相关市场中。

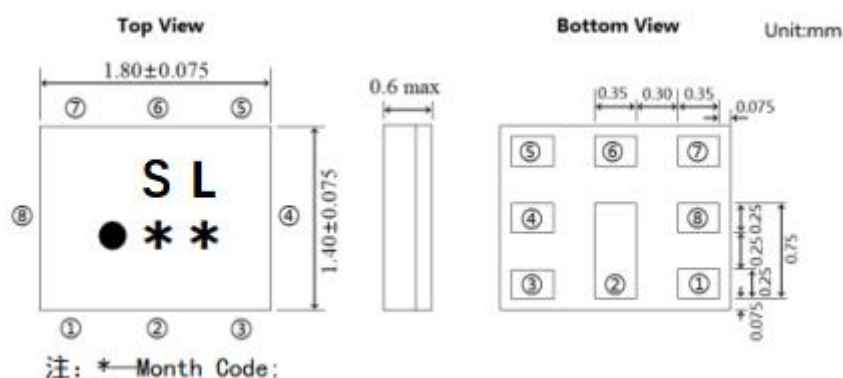
Microgate SAW Component is applicable for WIFI/GPS/Mobile phone/Cordlessphonerelevant market.

2 品名构成 Product Identification

MS 18 U 847M - DU 20 S
① ② ③ ④ ⑤ ⑥ ⑦

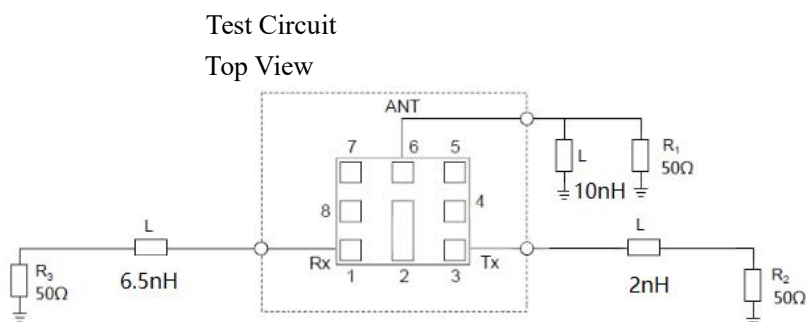
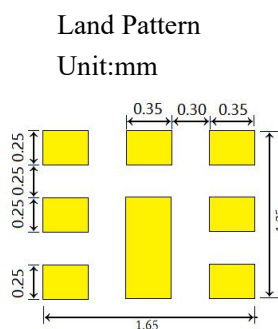
- ① 麦捷声表滤波器/Microgate SAW
- ② 尺寸/Size: (20-2016, 18-1814, 15-1511, 14-1411, 11-1109)
- ③ 输出/Output: (B-Balance out, U-Unbalance out)
- ④ 频率/Frequency: (847MHz-847MHz)
- ⑤ 型号/Type: (QP-QPX, DU-Duplexer, DI-Diplexer, Tx-Tx SAW, Rx-Rx SAW)
- ⑥ 频段/Band: 20-Band20
- ⑦ 流水号/Serial number

3 尺寸和管脚定义 Dimensions and PIN Configurations



PIN NO.	①	②	③	④	⑤	⑥	⑦	⑧
PIN Name	Rx	GND	Tx	GND	GND	ANT	GND	GND

4 推荐焊盘与测试电路 Recommended Land Pattern and Test Circuit



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5 电气性能 Electrical Characteristics

操作温度范围 Operating Temperature Range : -20 to +85℃

保存温度范围 Storage Temperature Range : -40 to +85℃

湿度敏感等级 Moisture Sensitivity Level: MSL 2a

静电敏感等级 Electrostatic Discharge(ESD) Sensitivity: 250V (Human Body Model)

端口电压 D.C. Volatage between the terminals: 3V (25℃±2℃)

Table1. Electrical Specification

No.	Item		Frequency	Specification				
			(MHz)	Min	Max	Typ.	Unit	
1	Tx to ANT	Insertion Loss	832~862		3.2	2.1	dB	
2		Ripple Deviation	832~862		2.2	1.2	dB	
3		Absolute Attenuation	10~771	32		38	dB	
			771~791	48		54	dB	
			791~820	35		40	dB	
			925~960	35		37	dB	
			1559~1563	3		45	dB	
			1565~1606	38		45	dB	
			1664~2170	38		43	dB	
			2400~2500	38		43	dB	
			2496~2586	35		42	dB	
			2570~2620	35		42	dB	
			2620~2690	35		42	dB	
			3328~3448	35		40	dB	
			4160~ 4310	13		18	dB	
			4900~ 5950	15		21	dB	
8			VSWR	832~862(TX)		2	1.5	
9				832~862(ANT)		2	1.6	
10		Input Signal Level		+29dBm, 5000h (55℃)				

Table2. Electrical Specification

No.	Item		Frequency	Specification			
			(MHz)	Min	Max	Typ.	Unit
1	ANT to Rx	Insertion Loss	791~821		4.8	3.1	dB
2		Ripple Deviation	791 ~ 821		2.5	2	dB
3		Absolute Attenuation	10 ~ 760	30		40	dB
4			760~770	20		49	dB
5			832~ 862	45		53	dB
6			880 ~ 915	34		41	dB
7			1710~1785	23		28	dB
8			2373~2463	20		25	dB
9			2400~2500	20		25	dB
10			2500~2570	20		24	dB
11			4900~5950	25		30	
12		VSWR	791 ~ 821(ANT)		2	1.7	
13			791 ~ 821(RX)		2.2	1.7	

Table3. Electrical Specification

No.	Item		Frequency	Specification			
			(MHz)	Min	Max	Typ.	Unit
1	Tx to Rx	Isolation	832 ~ 862	47		53	dB
2			791 ~ 821	50		54	dB

Frequency Performance

Tx to ANT



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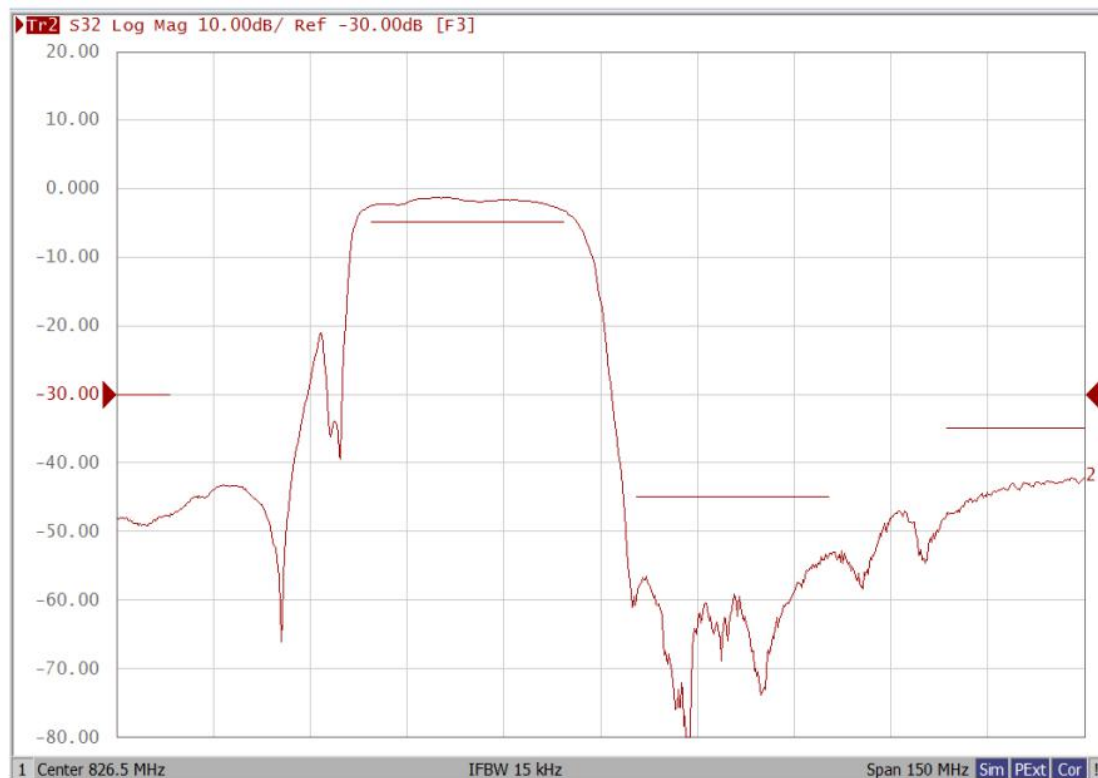
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ANT to Rx



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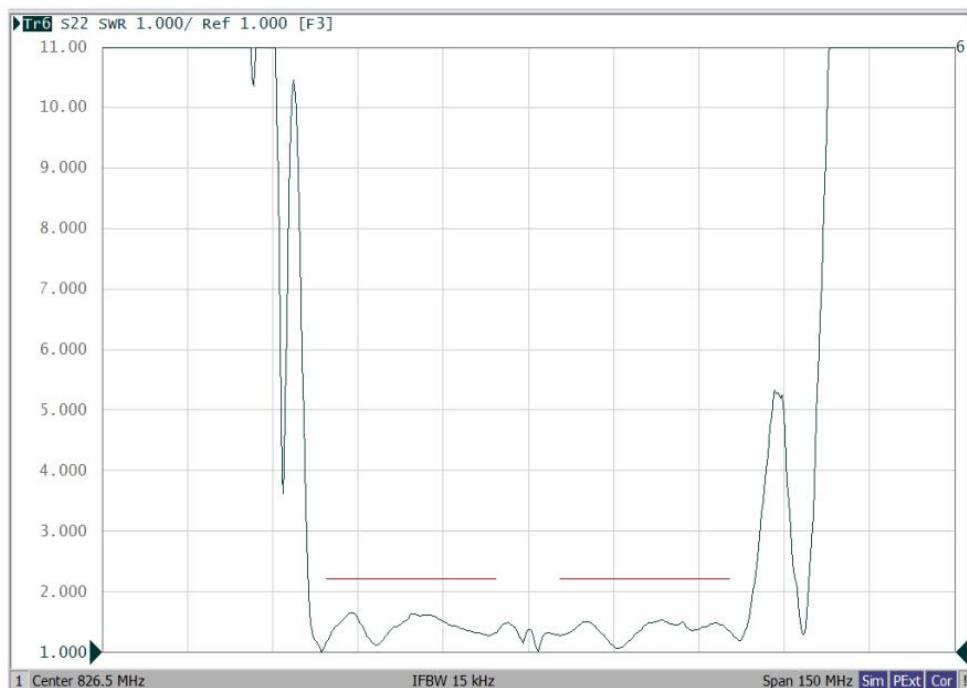
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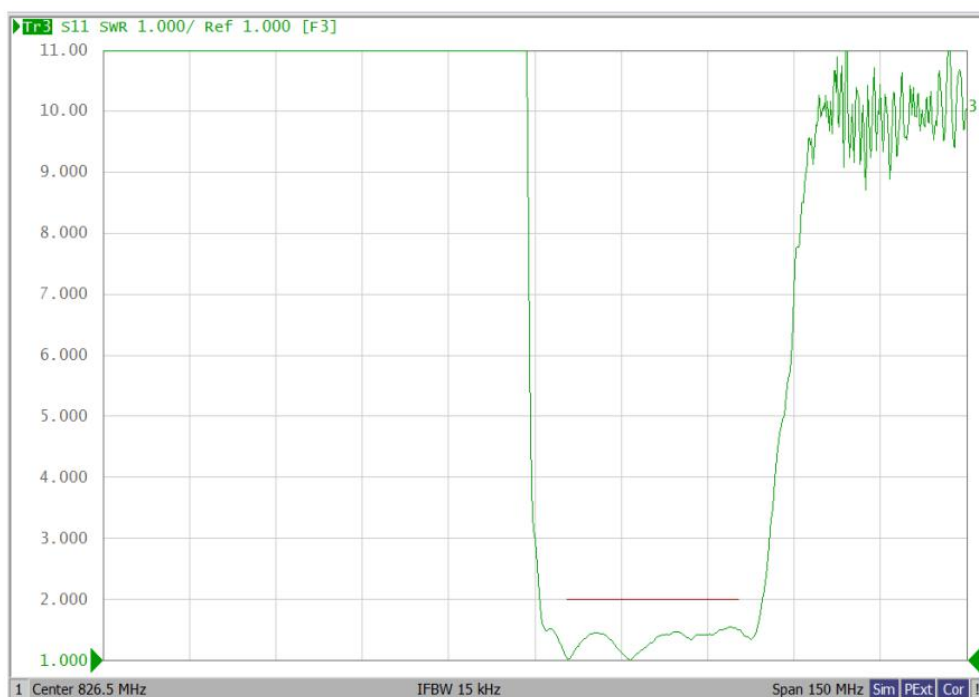
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VSWR ANT



VSWR TX



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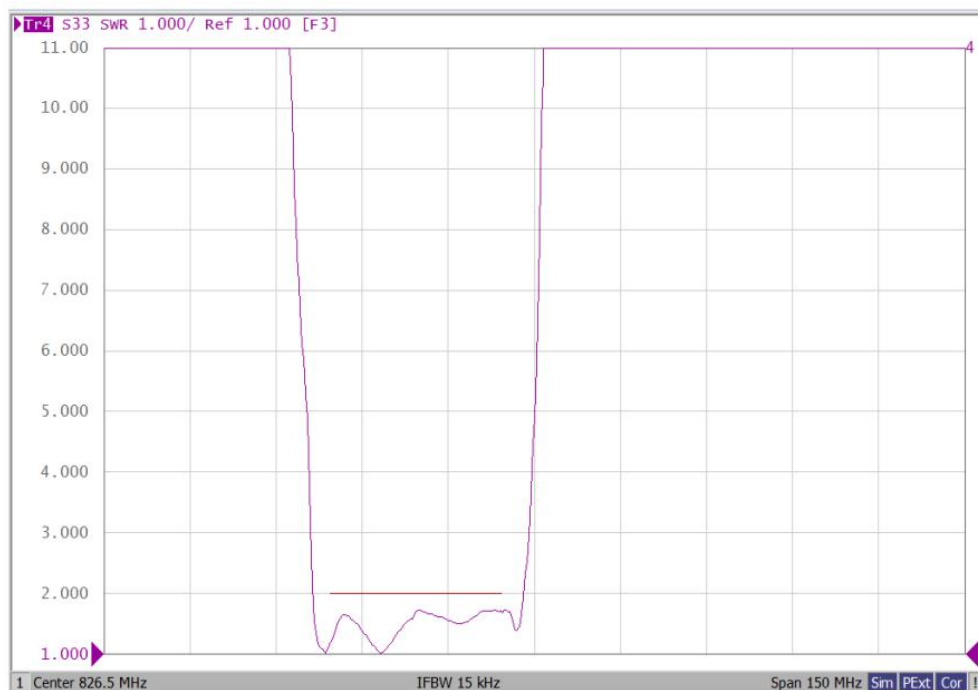
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电话(Tel): 0755-28085000

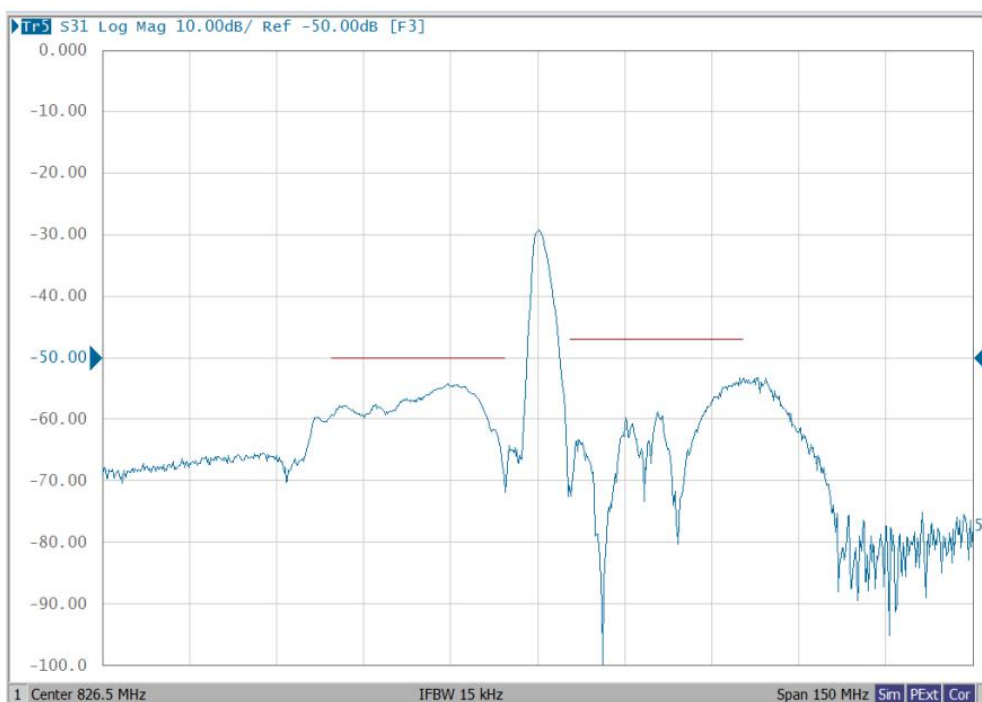
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VSWR RX



Isolation TX to RX



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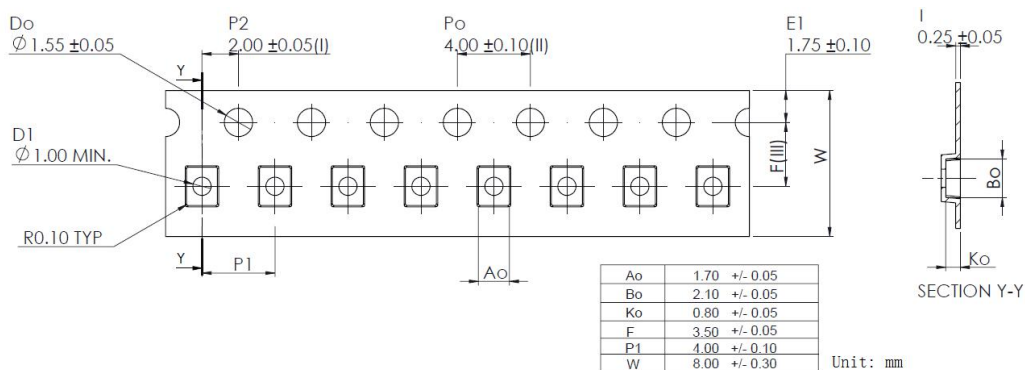
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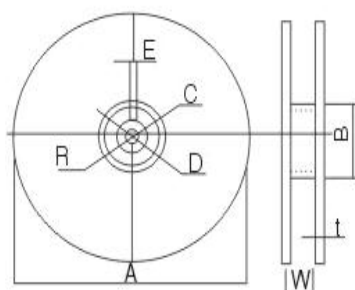
6 包装 Packaging

① 编带尺寸 Dimensions of Tape:



② 带轮尺寸 Dimensions of Reel

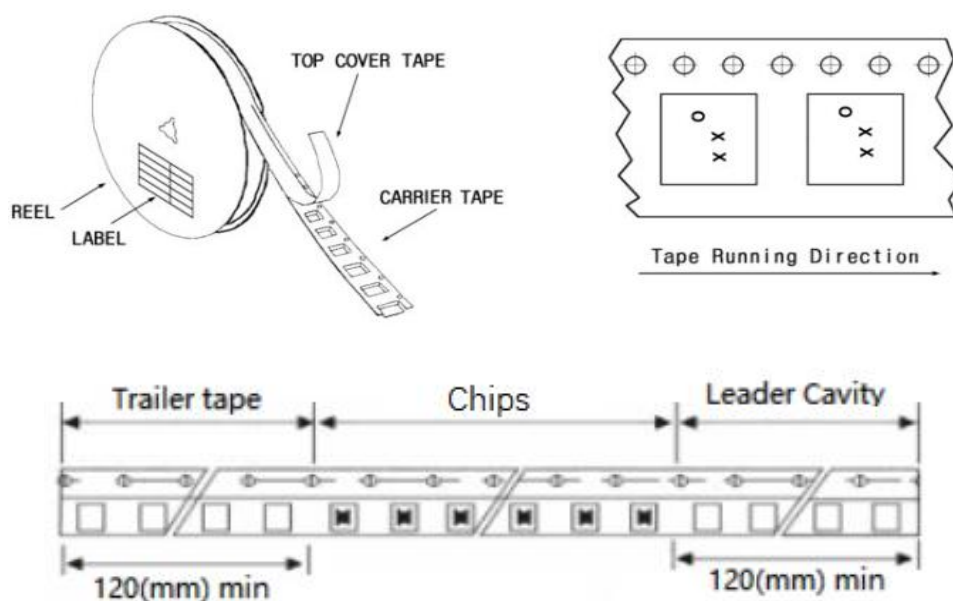
Unit: mm



Reel material: PS (Polystyrene)

A	178 $\pm$ 2
B	60 $\pm$ 2
C	13.0 $\pm$ 0.5
D	21.0 $\pm$ 0.8
E	2.0 $\pm$ 0.5
W	8.5 $\pm$ 1.0
t	1.2 $\pm$ 0.2
R	1.0 $\pm$ 0.25

③ 编带简图及拉伸方向 Taping figure and drawing direction:



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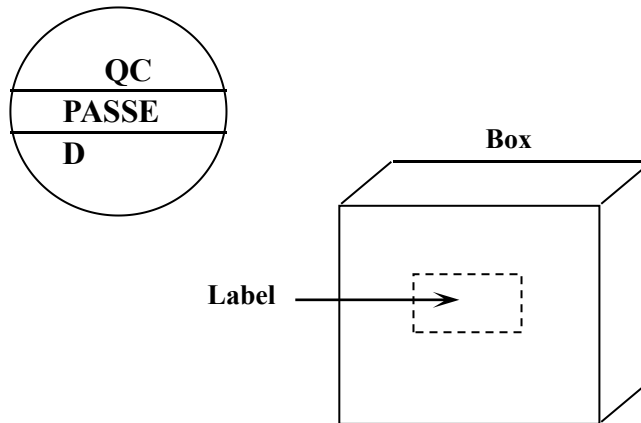
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检验合格后, 检验员在标签上盖上合格章。合格章如下所示: The eligible reels will be pressed a mark onto the surface. The mark will be as following:



③ 内包装盒标记: Marking on inner box

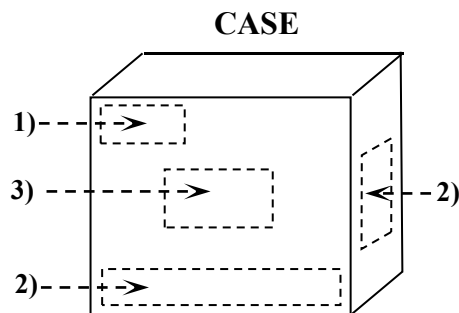
- a. 型号 MICROGATE part No.
- b. 每盒数量 Quantity per box
- c. 包装日期 Date

以上内容必须在标签上注明 (标签见 7.2 所示)。Above shall be shown on marking label (The marking label is shown in item 7.2).

④ 外包装箱标记 Marking on outer case:

- 1) 制造商 Manufacturer: "MICROGATE" ①
- "中国深圳制造" "Made in Shenzhen CHINA" ②
- 2) 发运标记 Ship marking:
"向上" "UP", "小心轻放" "HAND CARE", "防潮" "MOISTURE-PROOF".
- 3) 包装标签包括以下内容 Packing label include the following:
 - a. 型号 MICROGATE Part No
 - b. 总数量 Total quantity per case

- c. 包装日期 Date;



以上内容必须在标签上注明。(参见 7.2 所示)

All above shall be shown on marking label. (The marking label is shown in item 7.2)

8 保管 Storage

保存条件 Storage conditions

- 存放货物的库房应满足以下条件 Products should be storage in the warehouse on the following conditions

温度 Temperature: $\leq 40^{\circ}\text{C}$

湿度 Humidity : $\leq 70\%$ relative humidity

不允许温、湿度有极剧变化。No rapid change on temperature and humidity

- 禁止将产品保管在腐蚀性物质中，例如硫磺、氯气或者酸，否则将引起端头氧化，导致降低焊接性。

Don't keep products in corrosive gases such as sulfur, chlorine gas or acid, or it may cause oxidization of electrode, resulting in poor solder ability.

- 为了避免受潮气、灰尘等物质的影响，产品应保管于货架上。Products should be storage on the palette for the prevention of the influence from humidity, dust and so on.

- 产品保管在库房中时，应避免热冲击，振动以及直接光照等等。Products should be storage in the warehouse without heat shock, vibration, and direct sunlight and so on.

- 产品应密封包装 Products should be storage under the airtight packaged condition.