

客户 Customer: _____

日期 DATE: _____

纳入仕様书 SPECIFICATION

产 品 名 称 PRODUCT NAME: 声表滤波器

SAW Filter

贵 司 料 号 YOUR PART NO.: _____

敝 司 料 号 OUR PART NO.: MS11U1G57-G3

版 本 号 VERSION.: V1.3

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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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	2017.04.12	初稿 /New Released	梁启新
1.1	2018.09.26	版本升级/Version Upgrade	姚艳龙
1.2	2018.12.16	版本升级/Version Upgrade	姚艳龙
1.3	2019.05.08	版本升级/Version Upgrade	姚艳龙

目录 CATALOG

1	适用范围 Scope.....	4
2	品名构成 Product Identification.....	4
3	尺寸和管脚定义 Dimensions and PIN Configurations.....	4
4	推荐焊盘与测试电路 Recommended Land Pattern and Test Circuit.....	4
5	电气性能 Electrical Characteristics.....	5
6	包装 Packaging.....	8
7	装箱清单及标志 Packing documents and marking.....	9
8	保管 Storage.....	11

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/Cordless phone relevant market.

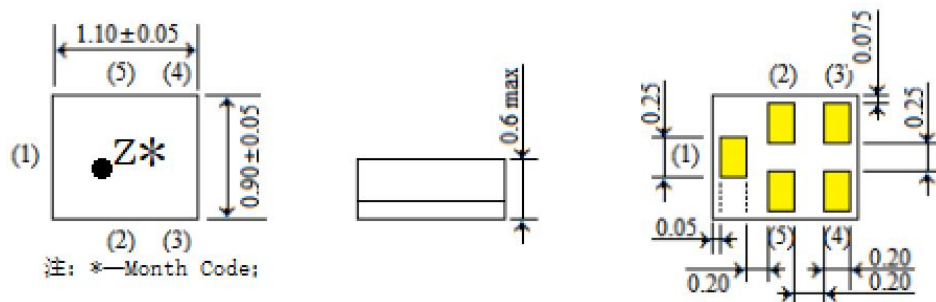
2 品名构成 Product Identification

MS 11 U 1G57 - G 3
① ② ③ ④ ⑤ ⑥

- ① 麦捷声表滤波器/Microgate SAW
- ② 尺寸/Size: 11 (20-2016, 18-1814, 15-1511, 14-1411, 11-1109)
- ③ 输出/Output: U (B-Balance out, U-Unbalance out)
- ④ 频率/Frequency: 1G57 (1G57-1.57GHz)
- ⑤ 型号/Type: G (GPS: Global Position System, 全球定位系统)
- ⑥ 频段/Band: 3 (1: GPS 频段; 2: GPS +GLONASS 频段; 3: GPS +GLONASS+北斗 2 频段)

3 尺寸和管脚定义 Dimensions and PIN Configurations

Unit: mm



PIN NO.	(1)	(2)	(3)	(4)	(5)
PIN Name	Input	GND	GND	Output	GND

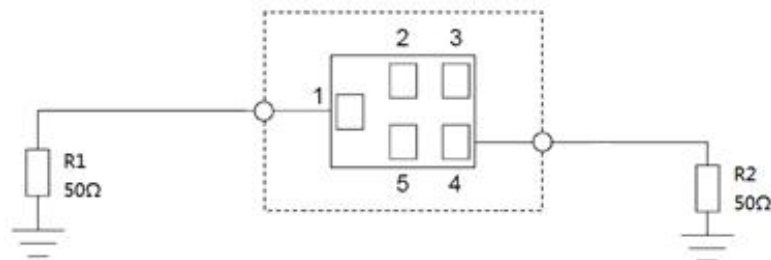
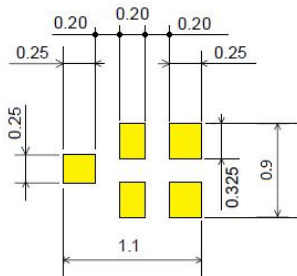
4 推荐焊盘与测试电路 Recommended Land Pattern and Test Circuit

Land Pattern

Test Circuit

Unit:mm

Bottom View



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4

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℃

测试温度范围 Test Temperature: 25℃±2℃

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)

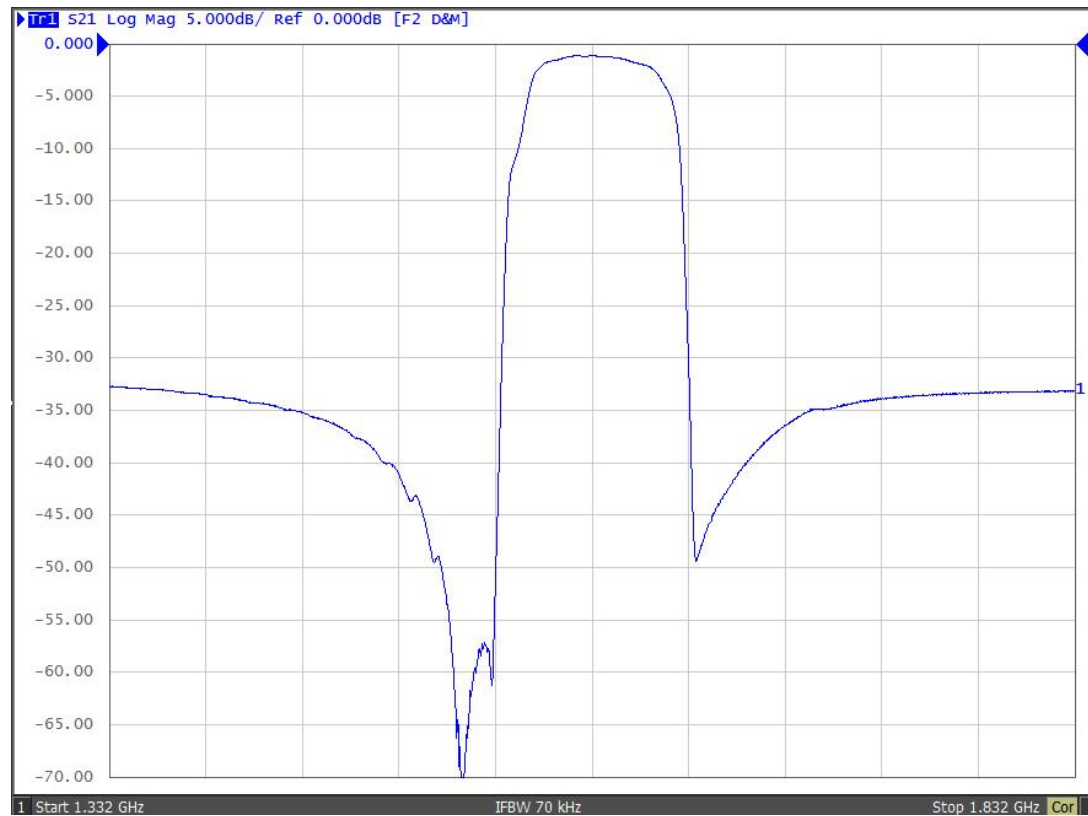
端口电压 D.C. Volatage between the terminals: 3V (25℃±2℃)

Table1. Electrical Specification

No.	Item	Frequency (MHz)	Specification			
			Min	Max	Typ.	Unit
1	Insertion Loss	1574.42 ~ 1576.42		1.5	1.0	dB
		1597.55 ~ 1605.89		2.1	1.6	dB
		1559.05 ~ 1563.14		2.1	1.6	dB
2	Ripple Deviation	1574.42 ~ 1576.42		0.8	0.1	dB
		1597.55 ~ 1605.89		1.3	0.4	dB
		1559.05 ~ 1563.14		1.3	0.2	dB
3	Group Delay Ripple	1574.42 ~ 1576.42		6.0	1.0	ns
		1597.55 ~ 1605.89		12	4.0	ns
		1559.05 ~ 1563.14		13	5.0	ns
4	Absolute Attenuation	699~ 716	31		34	dB
5		777~ 787	31		34	dB
6		814 ~ 849	30		33	dB
7		880 ~ 915	30		33	dB
8		1427.9 ~ 1446.9	34		37	dB
9		1447.9 ~ 1462.9	35		38	dB
10		1710 ~ 1785	32		35	dB
11		1850~1915	32		35	dB
12		1920~1980	32		35	dB
13		2400 ~ 2500	33		36	dB
14		2500 ~ 2570	33		36	dB
15	Input VSWR	1574.42 ~ 1576.42		2.1	1.5	
		1597.55 ~ 1605.89		2.0	1.4	
		1559.05 ~ 1563.14		2.0	1.5	
16	Output VSWR	1574.42 ~ 1576.42		2.1	1.5	
		1597.55 ~ 1605.89		2.0	1.4	
		1559.05 ~ 1563.14		2.0	1.5	
17	Input Signal Level	Max: 15 dBm,				

Frequency Performance

Frequency Response



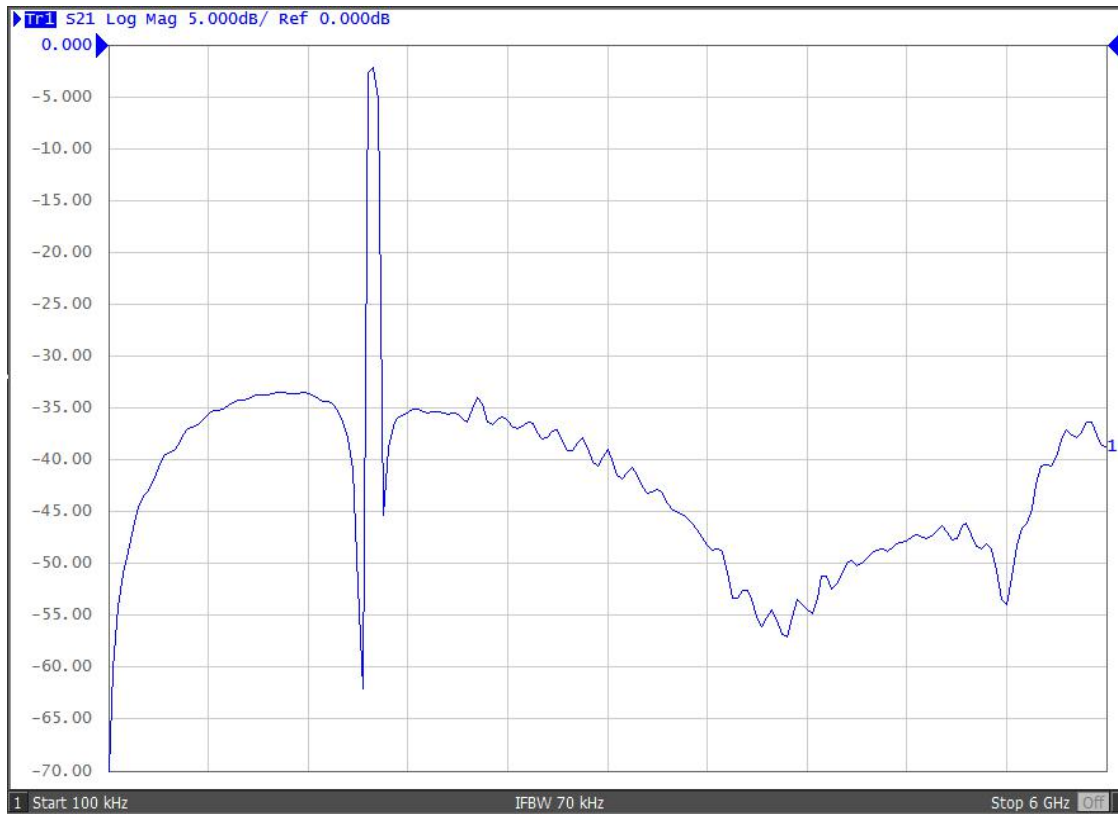
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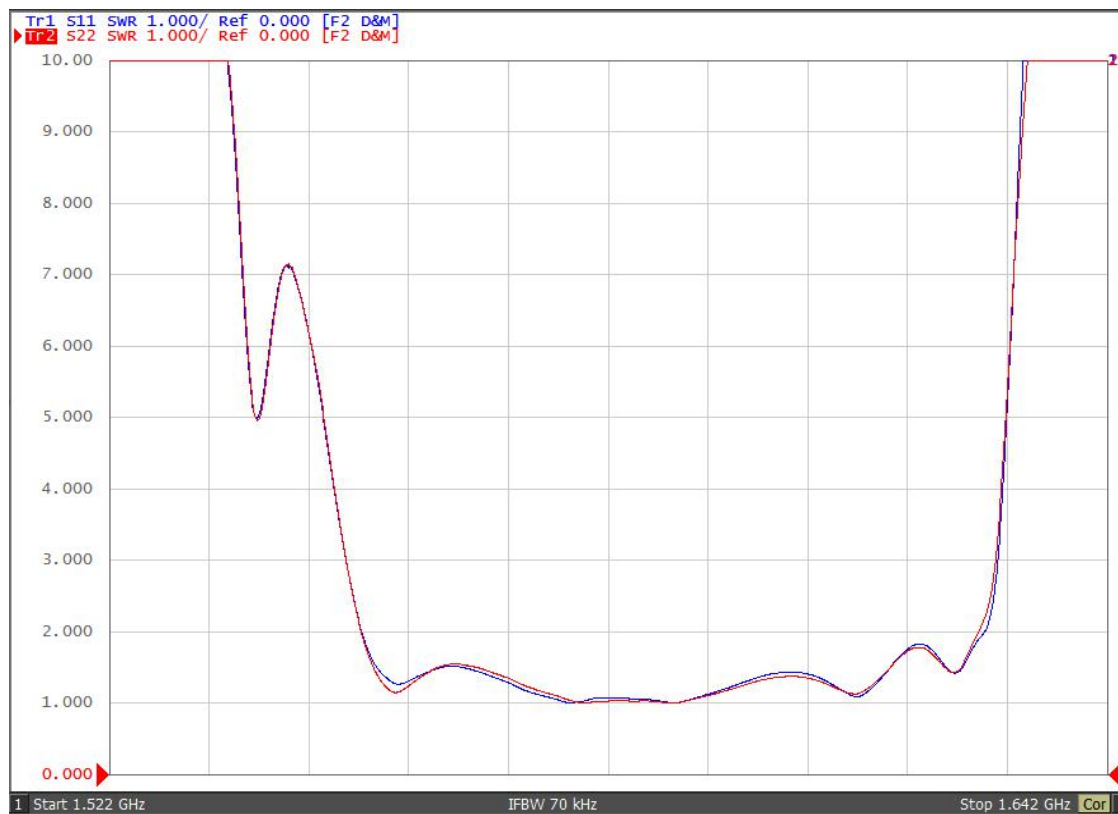
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VSWR



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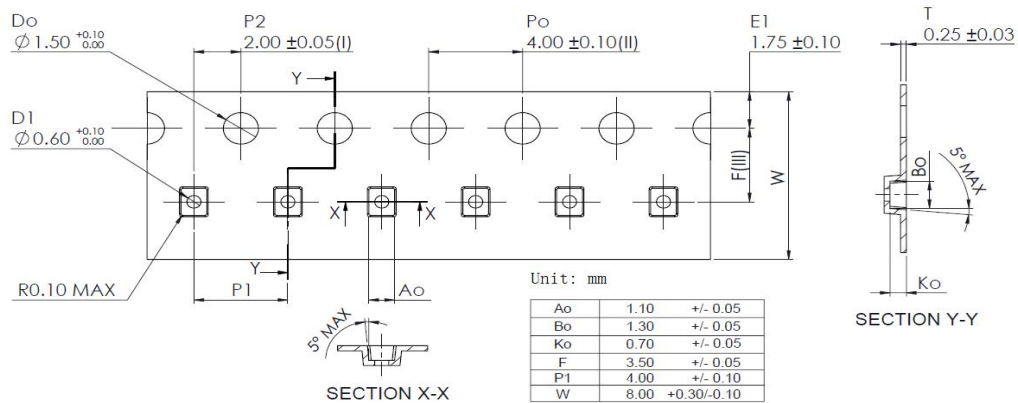
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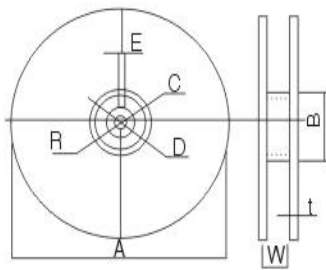
6 包装 Packaging

① 编带尺寸 Dimensions of Tape:



② 带轮尺寸 Dimensions of Reel

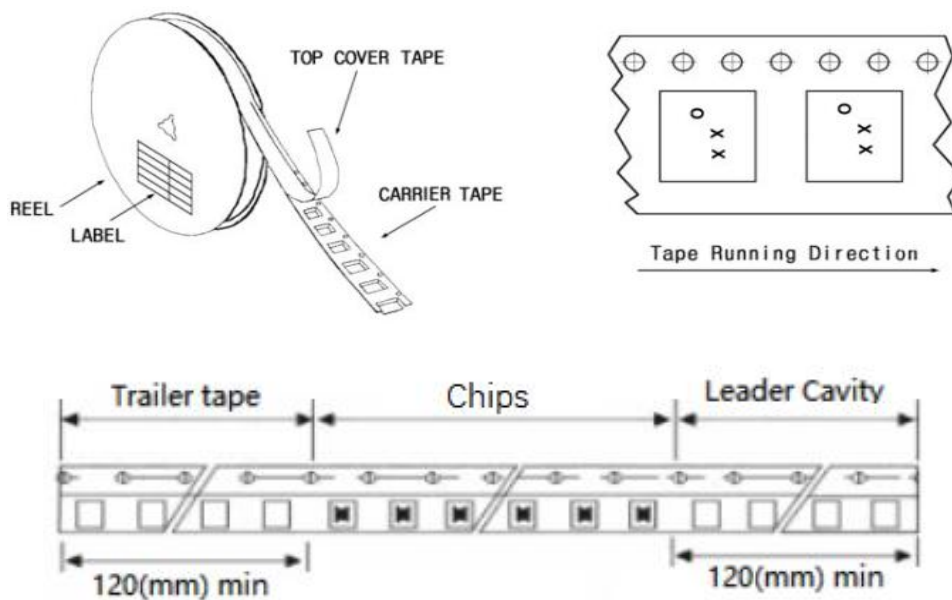
Unit: mm



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

Reel material: PS (Polystyrene)

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



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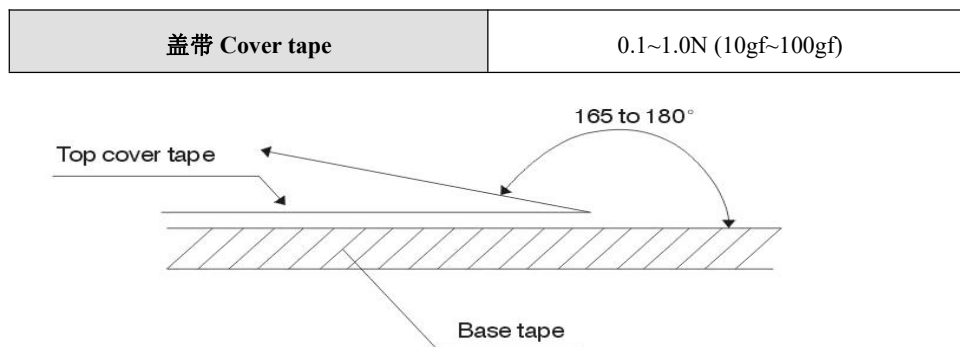
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④ 盖带的剥离强度 Peeling strength of cover tape:



测试条件 Test condition:

- 1) 剥离角度 peel angle: 165°~180° vs. carrier tape.
- 2) 剥离速度 peel speed: 300mm/min±10%.

⑤ 包装数量 Packaging quantities: 5000 PCS / Reel

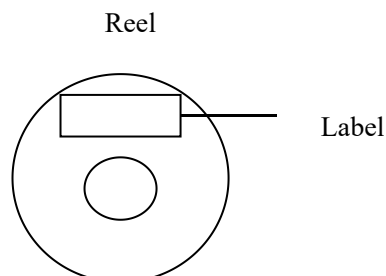
7 装箱清单及标志 Packing documents and marking

① 包装文件 Packing documents

- a. 装箱清单 Packing list.
- b. 合格证书 Certificate of compliance.

② 盘上标记 Marking on reels:

- a. 麦捷料号 MICROGATE Part No.
- b. 生产批号 Lot number
- c. 盘装数量 Quantity per reel
- d. 检验员号 Inspector No.



以上内容必须在标签上注明.All above shall be shown on marking label

麦捷公司标签如下所示: MICROGATE marking label will be as following:

MICROGATE		
CUSTOMER:	P. O. NO	
CUSTOMER PART NO:	DATE CODE	LOT NO
MG PART NO:	QUANTITY	INSP. NO

MG PART NO

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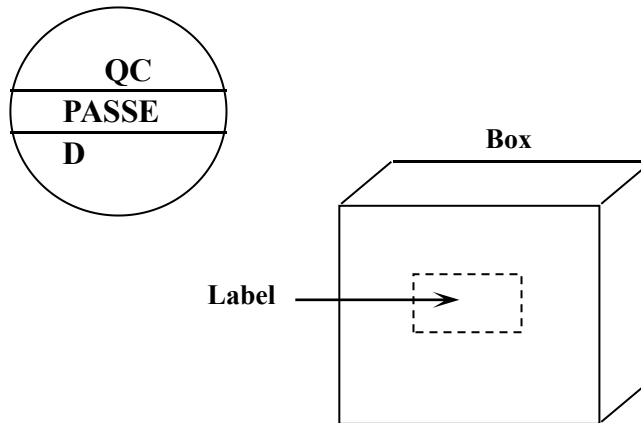
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检验合格后,检验员在标签上盖上合格章。合格章如下所示: The eligible reels will be pressed a mark onto the surface. The mark will be as following:



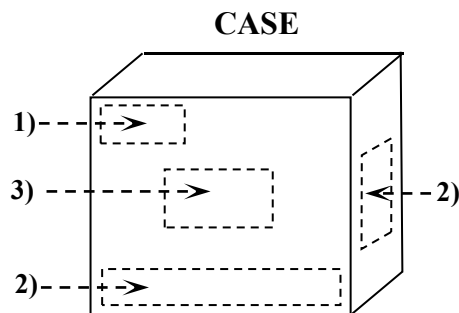
③ 内包装盒标记:Marking on inner box

- 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.