

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.: MS18U1G74-DU03B

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
SHENZHEN MICROGATE TECHNOLOGY CO., LTD
TEL: 86-755-28085000
FAX: 86-755-28085605

CFMD. 批准	CHKD. 审核	DSGD. 担当
姚艳龙	赖定权	赵新佳

深圳市麦捷微电子科技股份有限公司
地址: 深圳市龙华新区观澜街道高尔夫大道裕新路
电话(Tel): 0755-28085000 传真(Fax): 0755-28085605

邮编(Postcode): 518110

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
0.0	2017.5.25	预稿 /preliminary	梁启新
1.0	2020.11.09	初稿 /New Released	卓群飞

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1 适用范围 Scope

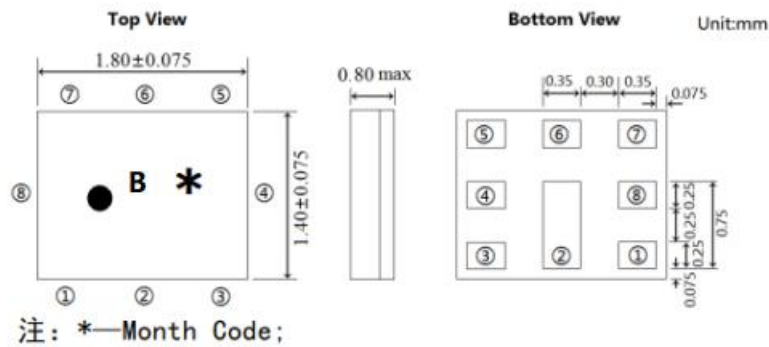
麦捷声表滤波器系列产品设计用于 WIFI、GPS、移动电话和无绳电话机等相关市场中。
Microgate SAW Component is applicable for WIFI/GPS/Mobile phone/Cordless phone relevant market.

2 品名构成 Product Identification

MS 18 U 1G74 - DU 03 B
① ② ③ ④ ⑤ ⑥ ⑦

- ① 麦捷声表滤波器/Microgate SAW
- ② 尺寸/Size: 18(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: 1G74 -1.74GHz
- ⑤ 型号/Type: DU(QP-QPX, DU-Duplexer, DI-Diplexer, TX-TX SAW, RX-RX SAW)
- ⑥ 频段/Band: 03-Band3
- ⑦ 流水号/Serial number

3 尺寸和管脚定义 Dimensions and PIN Configurations

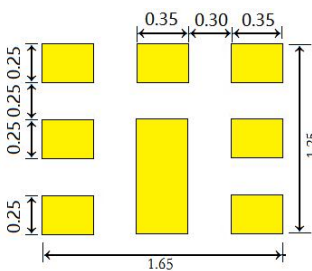


PIN NO.	①	②	③	④	⑤	⑥	⑦	⑧
PIN Name	RX	GND	TX	GND	GND	ANT	GND	GND

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

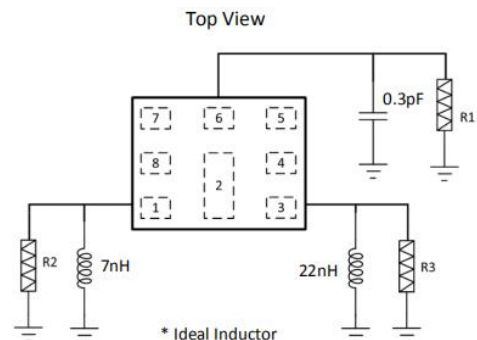
Land Pattern

Unit:mm



Test Circuit

Top View



5 电气性能 Electrical Characteristics

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

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

湿度敏感等级 Moisture Sensitivity Level: MSL 3

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°C±2°C)

Table1. Electrical Specification

No.	Item	Frequency (MHz)	Specification			Note
			Min (dB)	Max (dB)	Typ. (dB)	
1	Insertion Loss	1710~1785		2.7	2.2	+25°C
		1710~1785		3.5	2.2	-20 to +85°C
2	Ripple Deviation	1710~1785		1.2	0.6	Any 5MHz in-band
3	Tx to ANT	450~1559	26		34	
4		1559~1606	26		32	
5		1805~1880	40		48	
6		1920~1980	28		36	
7		2110~2170	20		25	
8		2400~2500	15		21	
9		2500~2690	15		20	
10		3420~3560	25		32	
11		5130~5355	15		21	
12		VSWR	1710~1785(Tx)		2.2	1.3
13	1710~1785(ant)			2.2	1.6	
14	Input Signal Level	+30dBm, CW,5000h(55°C)				

Table2. Electrical Specification

No.	Item	Frequency (MHz)	Specification			Note	
			Min (dB)	Max (dB)	Typ. (dB)		
1	Insertion Loss	1805~1880		2.7	2.2	+25°C	
		1805~1880		3.5	2.2	-20 to +85°C	
2	Ripple Deviation	1805~1880		1.2	0.6	Any 5MHz in-band	
3	ANT to Rx	450~1710	20		27		
4		1710~1785	40		52		
6		1920~1980	27		35		
7		2010~2025	27		35		
8		2300~2400	35		52		
9		2400~2500	35		47		
10		2500~2690	32		43		
11		2690~6000	25		35		
12		VSWR	1805~1880(Rx)		2.3	1.8	
			1805~1880(ANT)		2.3	1.6	

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电话(Tel): 0755-28085000

传真(Fax): 0755-28085605

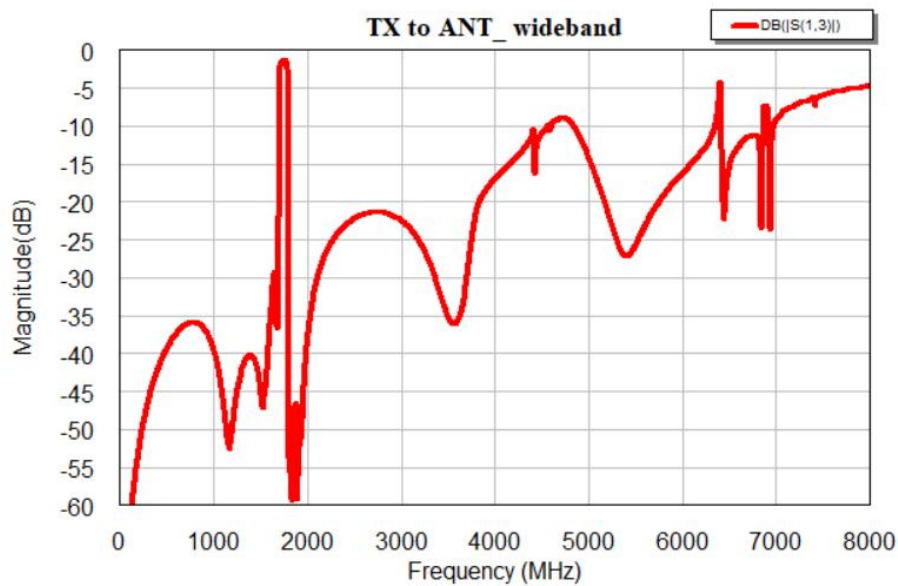
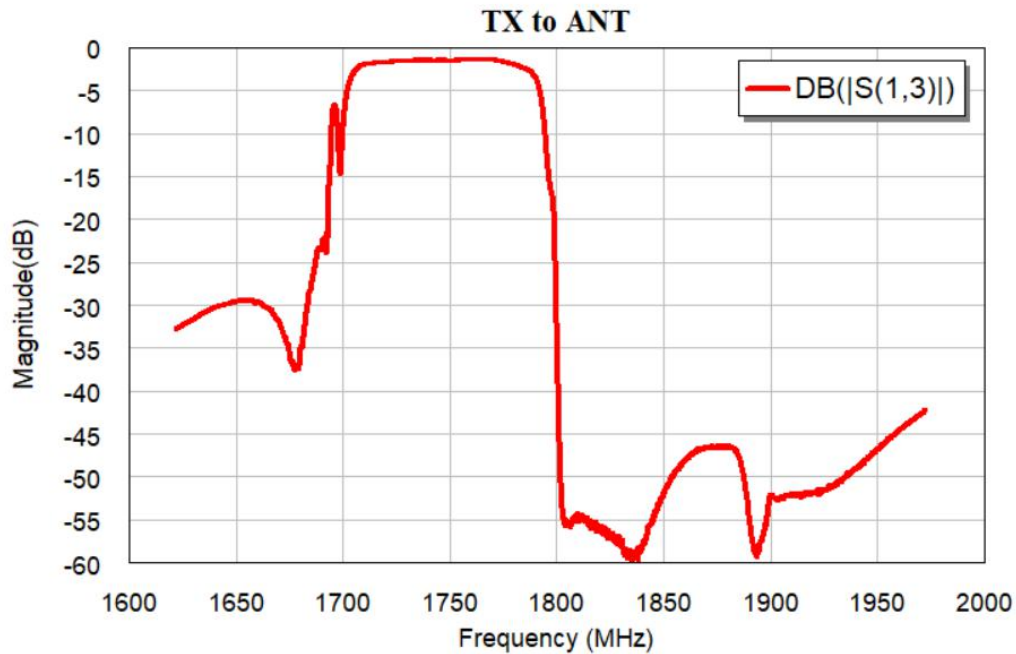
邮编(Postcode): 518110

Table3. Electrical Specification

No.	Item		Frequency (MHz)	Specification		
				Min (dB)	Max (dB)	Typ. (dB)
1	Tx to Rx	Isolation	1710~1785	50		55
2			1805~1880	47		54

Frequency Performance

TX to ANT



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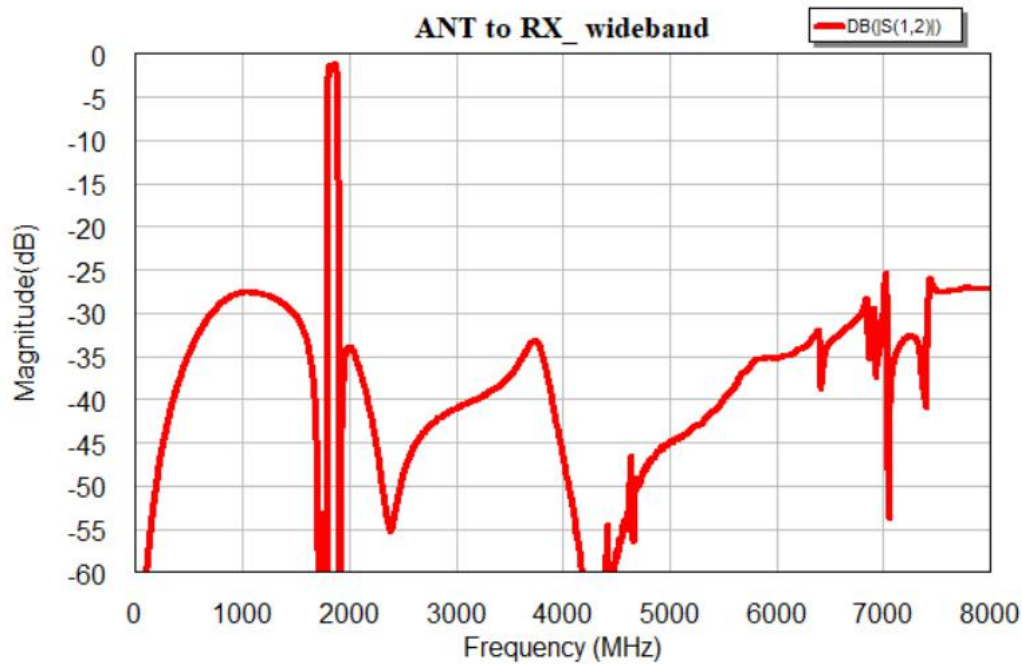
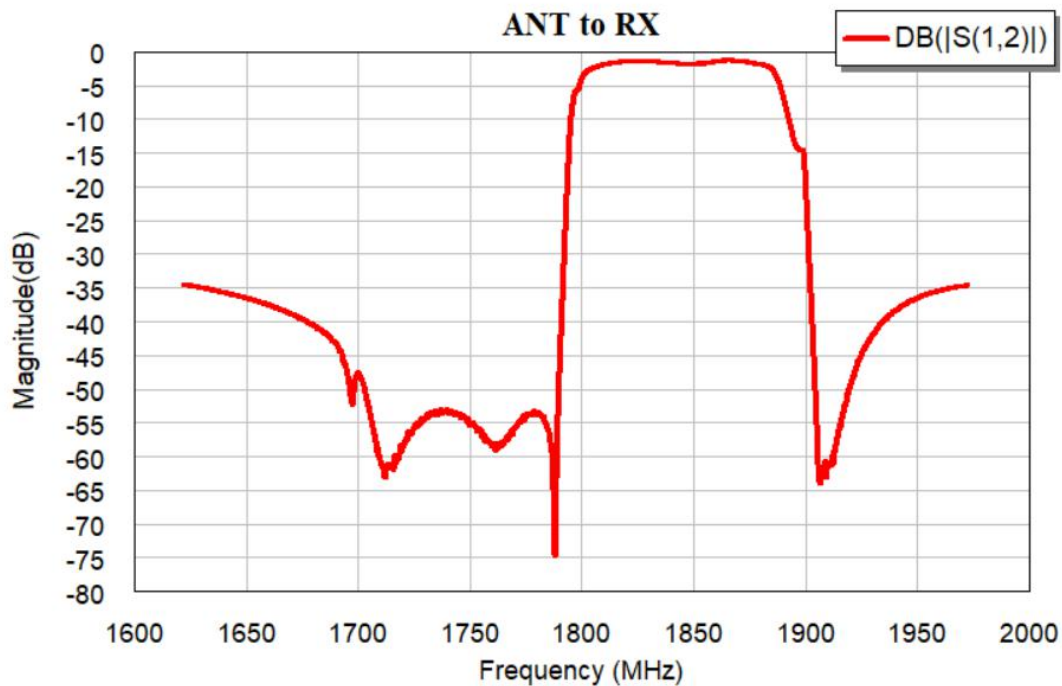
地址：深圳市龙华新区观澜街道高尔夫大道裕新路

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ANT to RX



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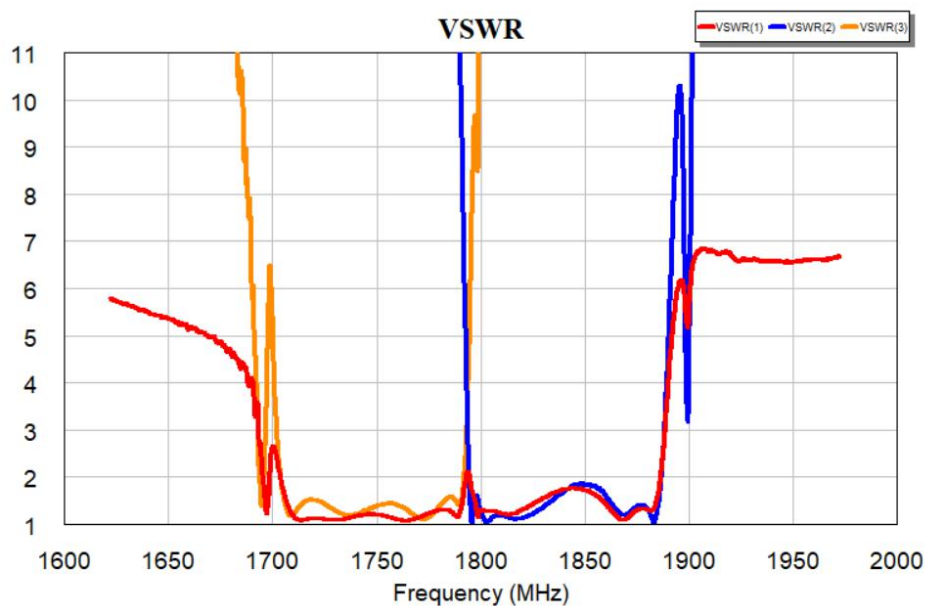
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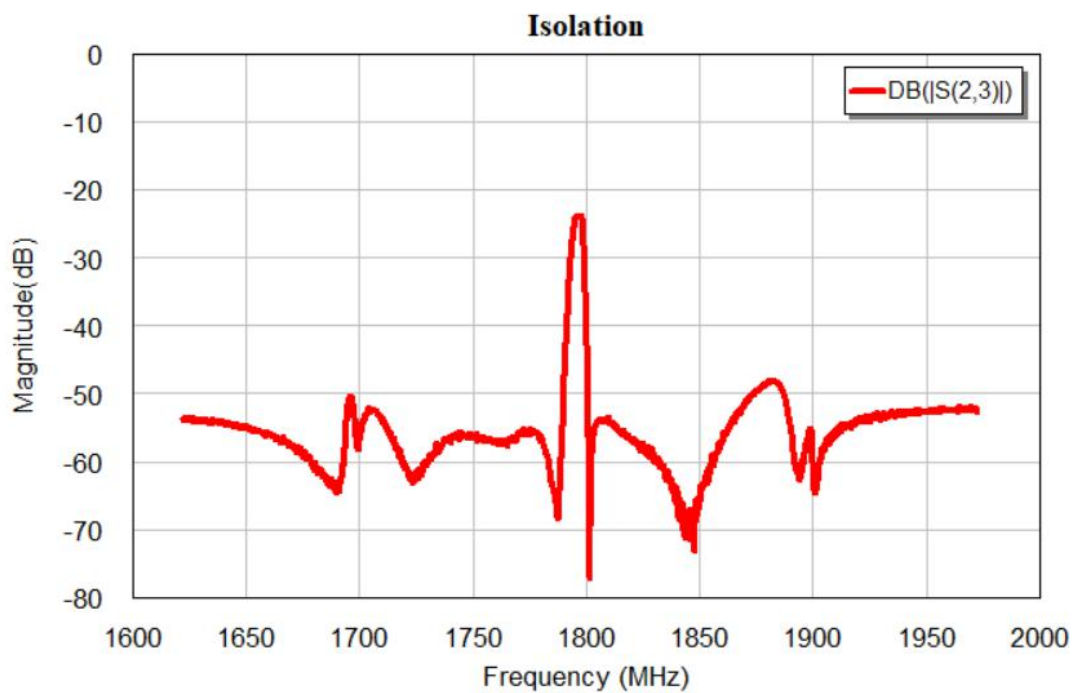
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VSWR

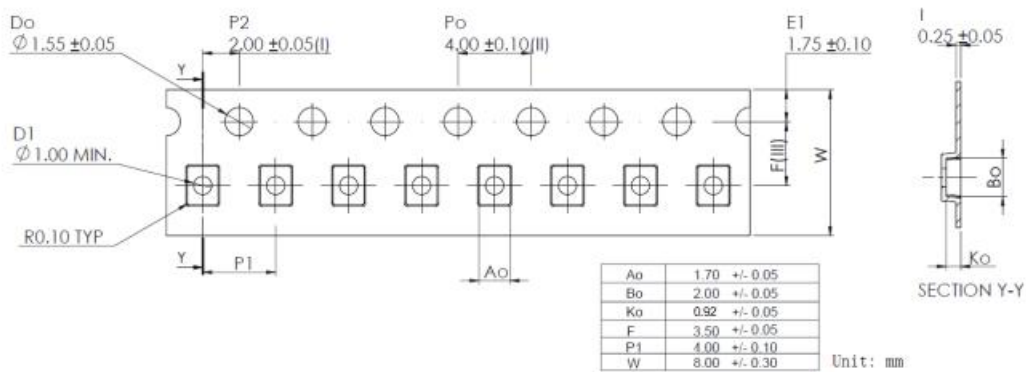


Isolation



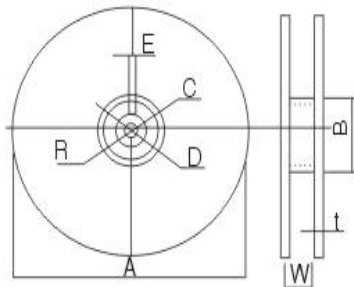
6 包装 Packaging

① 编带尺寸 Dimensions of Tape:



② 带轮尺寸 Dimensions of Reel

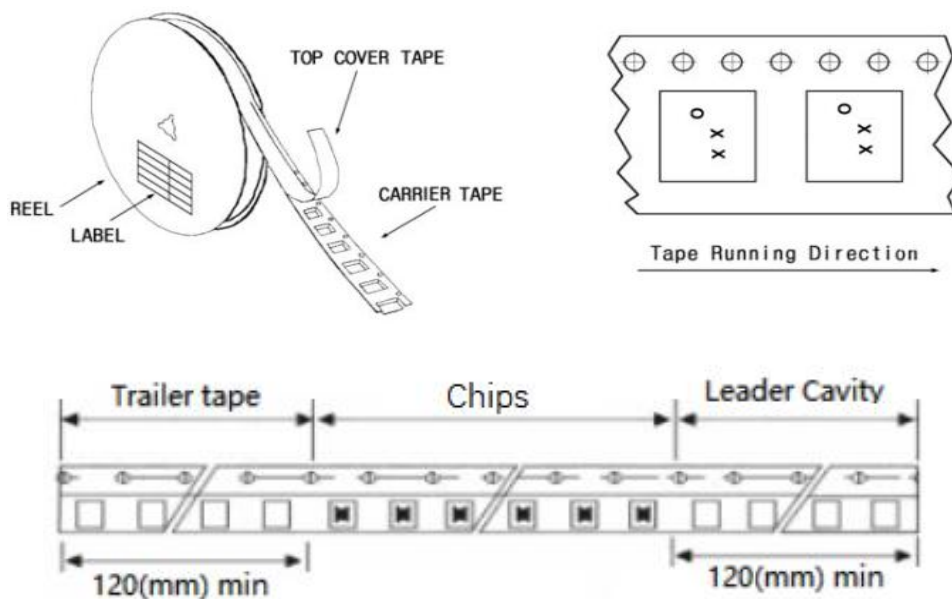
Unit: mm



Reel material: PS (Polystyrene)

A	178±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

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



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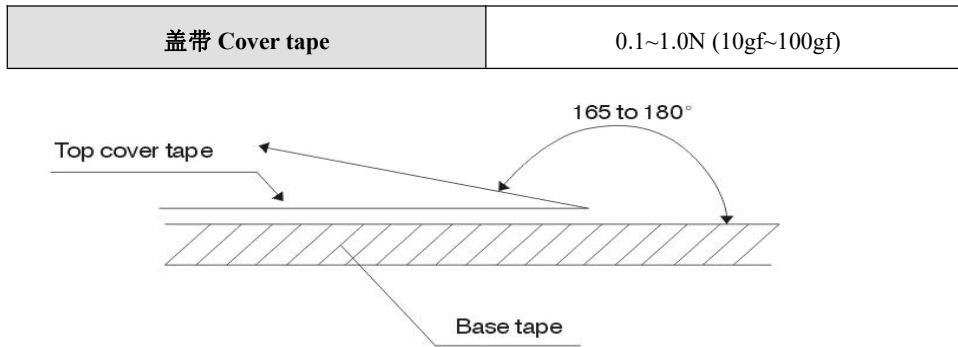
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④ 盖带的剥离强度 Peeling strength of cover tape:



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

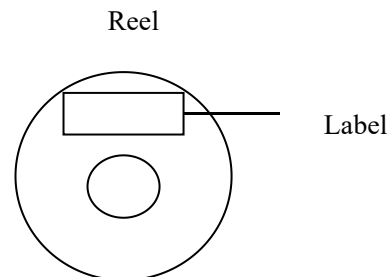
7 装箱清单及标志 Packing documents and marking

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.



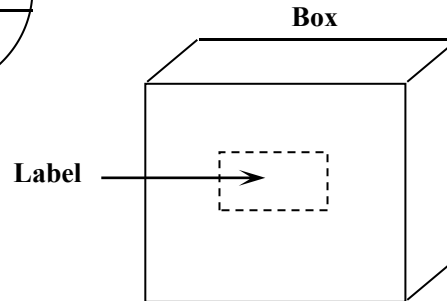
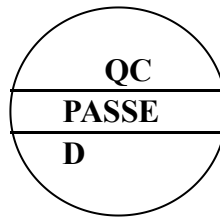
以上内容必须在标签上注明.All above shall be shown on marking label

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

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:



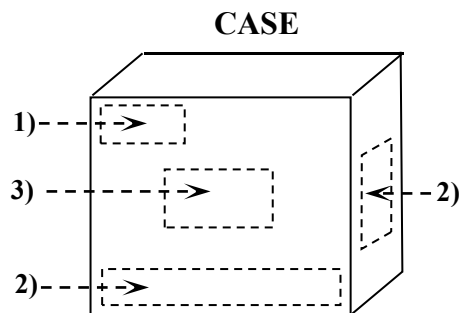
③ 内包装盒标记: Marking on inner box

- 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.