客户 Customer: 日期 DATE:

纳入仕样书
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.: MS11U1G96-RX02S
版 本 号 VERSION.: V1.7

接受 RECEPTION THE SPECIFICATION HAS BEEN ACCEPTED. 该纳入仕样书已被我司接受 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
赵拥军	赖定权	赵新佳

纳入仕样书改定履历

MODIFY HISTORY OF SPECIFICATION

NO.	修改日期/DATE	修改内容/CONTENT	批准/APPROVED
1.0	2015.08.21	初稿 /New Released	梁启新
1.1	2017.09.25	添加湿度敏感等级规格/Add Moisture Sensitivity Level	梁启新
1.2	2018.09.26	版本升级/Version Upgrade	姚艳龙
1.3	2018.12.16	版本升级/Version Upgrade	姚艳龙
1.4	2019.05.08	版本升级/Version Upgrade	姚艳龙
1.5	2021.09.23	版本升级/Version Upgrade	赵拥军
1.6	2021.11.22	版本升级/Version Upgrade	赵拥军
1.7	2022.02.11	版本升级/Version Upgrade	赵拥军

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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.

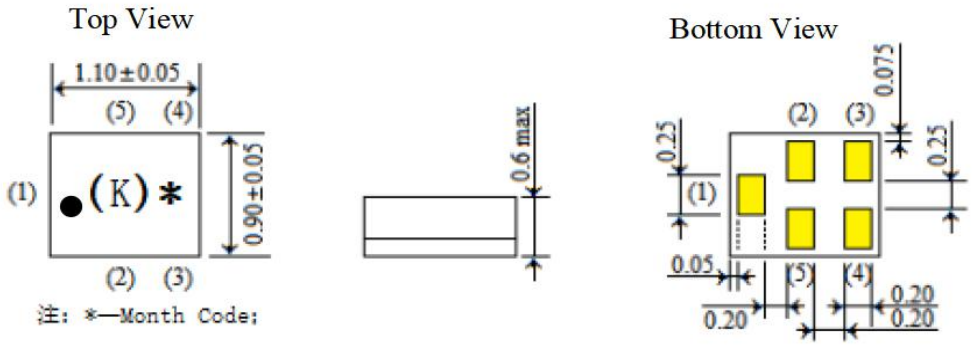
2 品名构成 Product Identification

MS	11	U	1G96	–	RX	02	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：（1G96-1.96GHz)
⑤ 型号/Type：(QP-QPX,DU-Duplexer, DI-Diplexer, TX-TX SAW, RX-RX SAW)
⑥ 频段/Band：（02-Band2）
⑦ 流水号/Serial number

3 尺寸和管脚定义 Dimensions and PIN Configurations

Unit:mm

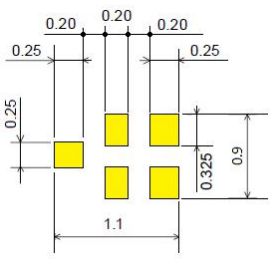


PIN NO.	(1)	(2)	(3)	(4)	(5)
PIN Name	Input	GND	GND	Output	GND

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

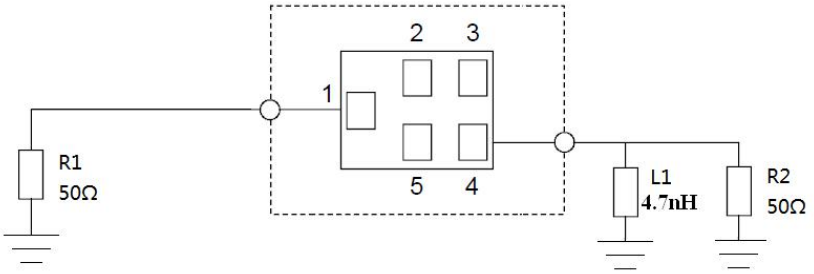
Land Pattern

Unit:mm



Test Circuit

Bottom View



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)

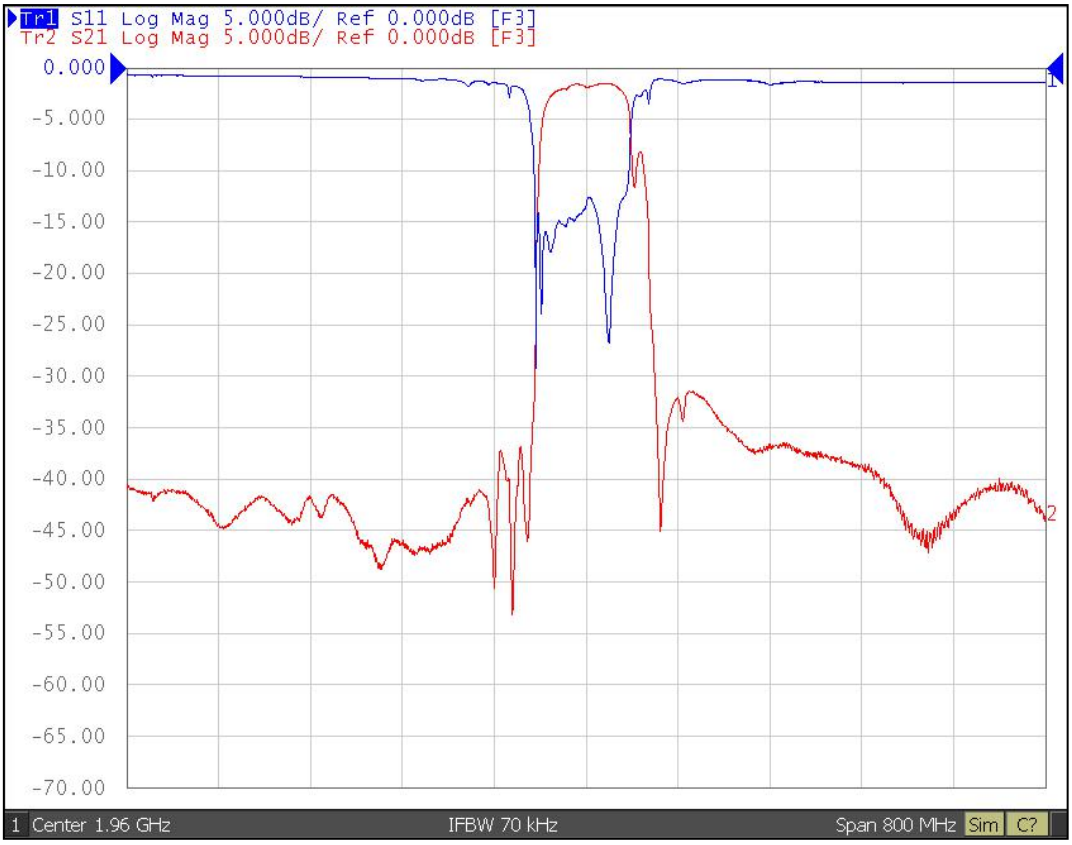
端口电压 D.C. Volatage between the terminals: 3V (25℃±2℃)

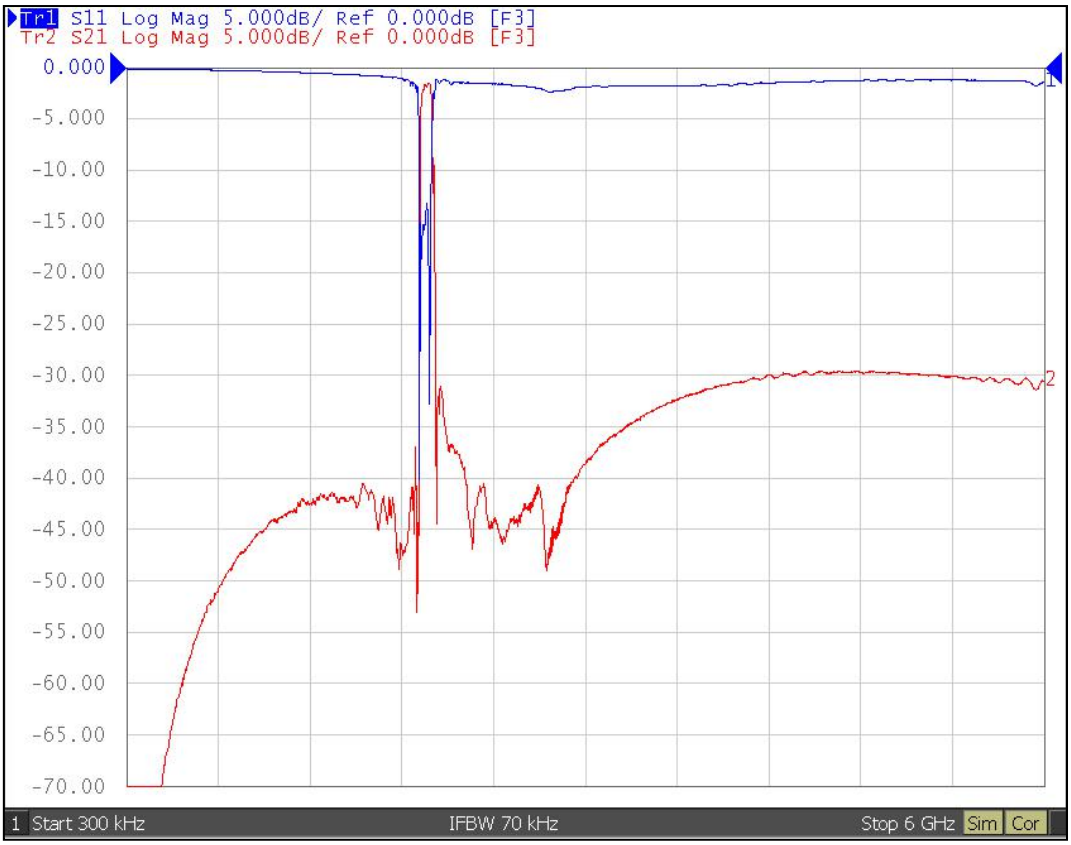
Table1. Electrical Specification

No.	Item		Frequency (MHz)	Specification			
				Min	Max	Typ.	Unit
1	ANT to Rx	Insertion Loss	1930~1990		2.5	1.7	dB
2		Ripple Deviation	1930~1990		1.8	0.9	dB
3		Absolute Attenuation	DC~960	38		41	dB
4			1558~1608	35		36	dB
5			1710~1850	35		37	dB
6			1850~1910	32		39	dB
7			2020~2070	7		27	dB
8			2070~2400	25		33	dB
9			2400~2500	33		39	dB
10			2500~3780	28		37	dB
11			3780~3980	30		40	dB
12			3980~5790	21		34	dB
13			5790~5970	21		34	dB
14			5970~7720	21		23	dB
15			7720~7960	17		23	dB
16			7960~8000	17		23	dB
17		VSWR	1930~1990(Input)		2.1	1.5	
18			1930~1990(Output)		2.1	1.5	
19	Input Signal Level		Max：15 dBm				

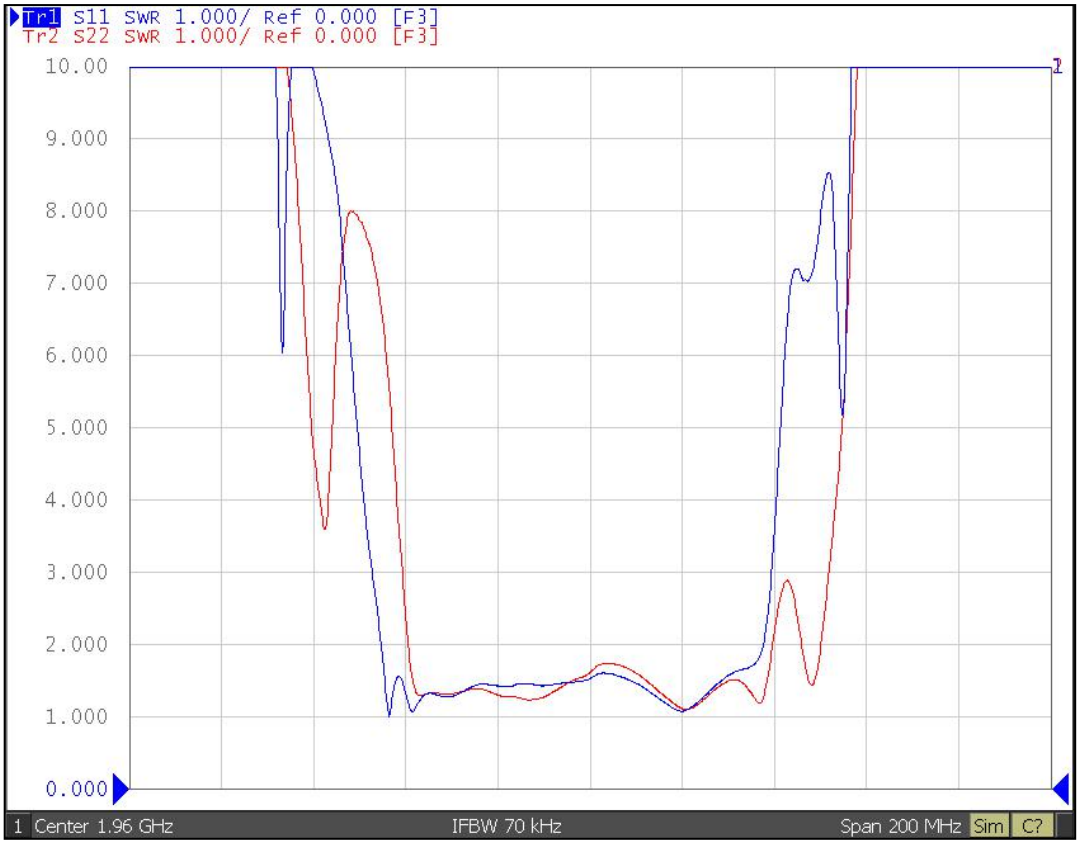
Frequency Performance

Frequency Response



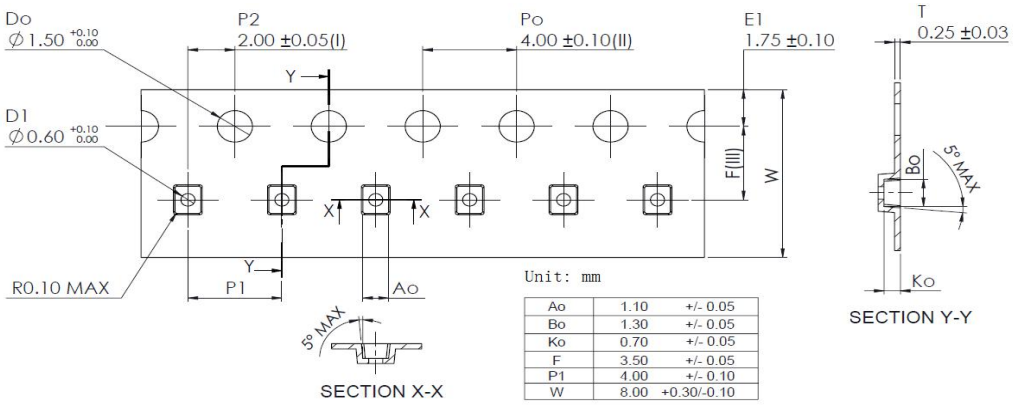


VSWR


Tr1 S11 SWR 1.000/ Ref 0.000 [F3]
Tr2 S22 SWR 1.000/ Ref 0.000 [F3]
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
1 Center 1.96 GHz
IFBW 70 kHz
Span 200 MHz
Sim
C?

6 包装 Packaging

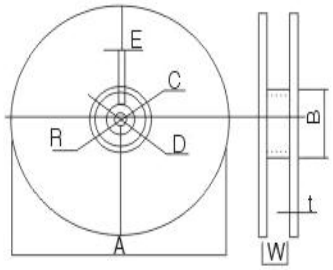
① 编带尺寸 Dimensions of Tape:



Ao	1.10	+/- 0.05
Bo	1.30	+/- 0.05
Ko	0.70	+/- 0.05
F	3.50	+/- 0.05
P1	4.00	+/- 0.10
W	8.00	+0.30/-0.10

② 带轮尺寸 Dimensions of Reel

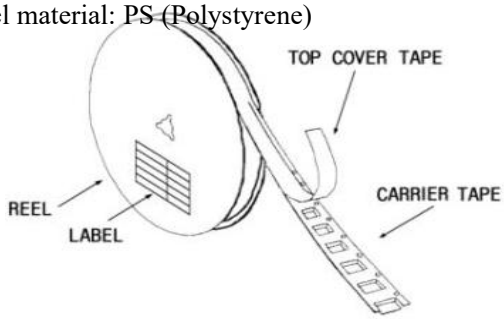
Unit: mm

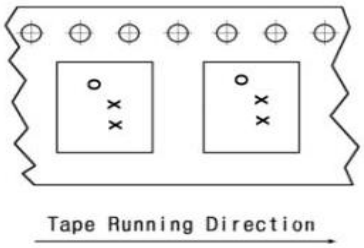


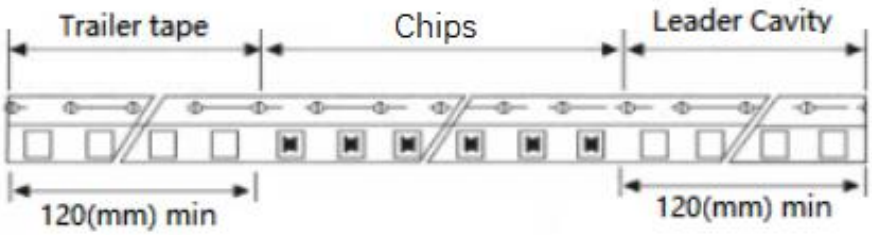
A	178±2
B	60±2
C	13.0±0.5
D	21.0±0.8
E	2.0±0.5
W	8.5±1.0
t	1.2±0.2
R	1.0±0.25

③ 编带 : and drawing direction:

Reel material: PS (Polystyrene)

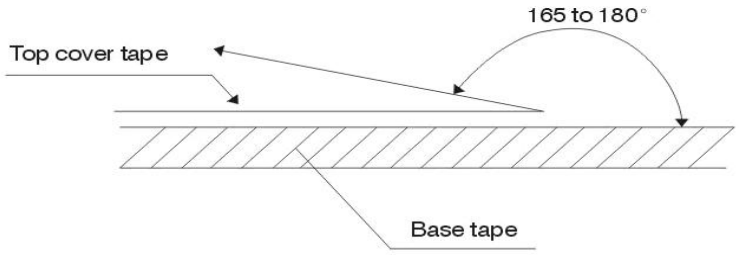






④ 盖带的剥离强度 Peeling strength of cover tape:

盖带 Cover tape	0.1~1.0N (10gf~100gf)



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.

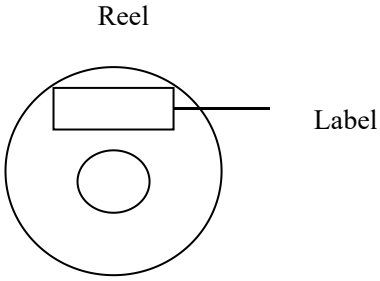
② 盘上标记 Marking on reels:

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

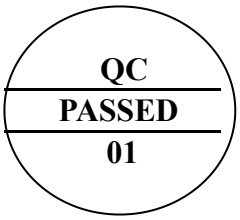
麦捷公司标签如下所示：MICROGATE marking label will be as following:

MICROGATE

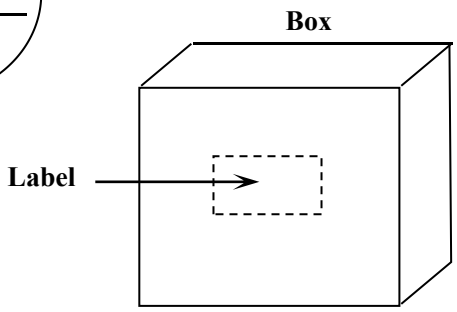
CUSTOMER:	P. O. NO	
CUSTOMER PART NO:	DATE CODE	LOT NO
MG PART NO:	QUANTITY	INSP. NO

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:

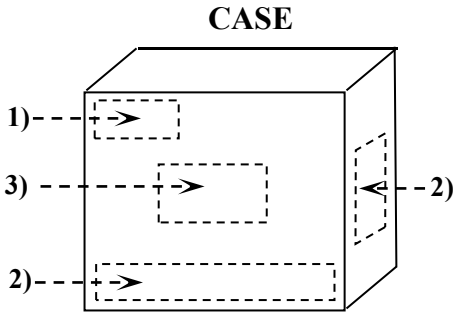
“向上” “UP”, “小心轻放”“HAND CARE”, “防潮”“MOISTURE-PROOF”.

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: ≤40℃

湿度 Humidity : ≤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.