客户 CUSTOMER: 日期 DATE:

纳入仕样书
SPECIFICATION

产 品 名 称 PRODUCT NAME: 微波带通滤波器

Microwave Band-Pass Filter

村 田 料 号 MURATA PART NO.:
敝 司 料 号 OUR PART NO.: MBPF18M5537-N10
版 本 号 VERSION.: V1.1

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

本纳入仕样书共 9 页

MANUFACTURING NAME

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CFMD. 批准	CHKD. 审核	DSGD. 担当
梁启新	付迎华	曾艳峰

纳入仕样书改定履历 MODIFY HISTORY OF SPECIFICATION

Ver.	DATE	CONTENT	APPROVED
1.0	2020.01.16	初稿 Constitute	梁启新
1.1	2021.01.14	更新功率容量 Modify Power Capacity 增加包装 Add Packaging	付迎华

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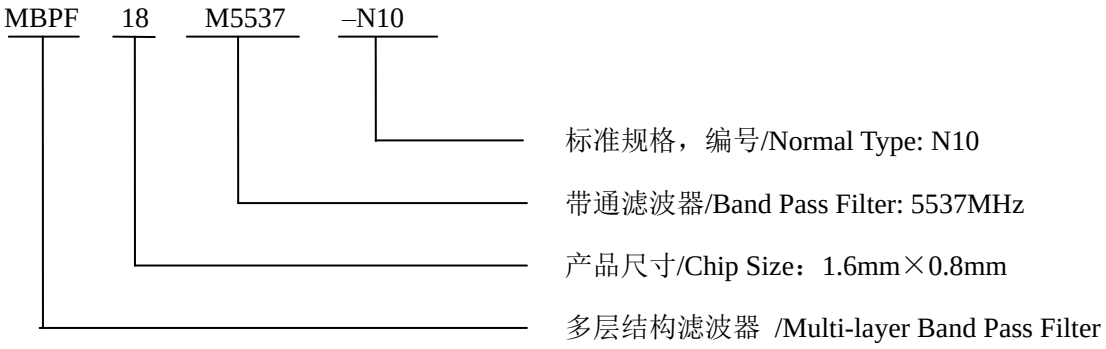
1 适用范围 Scope

“麦捷”微波带通滤波器系列产品设计用于 5G、LTE、WIFI、Bluetooth、PDA 和无绳电话机中，具有低的插入损耗、高的衰减和小体积 SMD 片式设计，能减少复杂的调校工作，可以简化电路设计。

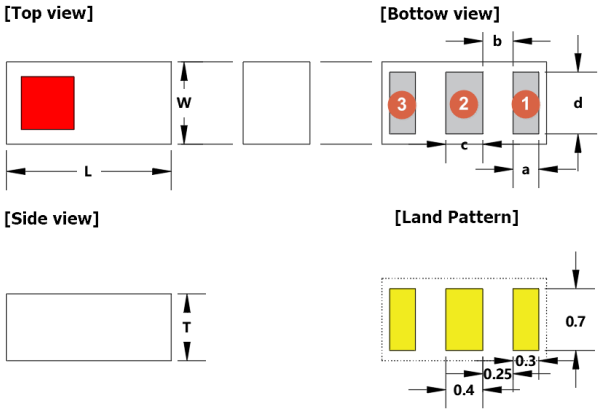
“Microgate” Microwave Band-Pass filter series are designed to be used in 5G、LTE、WIFI、Bluetooth、PDA & cordless phones with low insertion loss and high attenuation as well as small size SMD chip design , which can simplify your complex tuning and circuit design .

2 品名构成 Product Identification



3 形状、尺寸和材料 Appearance, Dimensions and Material

Unit：mm



L	W	T	a	b	c	d
1.6±0.1	0.8±0.1	0.65max	0.25±0.1	0.25±0.1	0.40±0.1	0.60±0.15

Pin configuration

1	IN/OUT
2	GND
3	IN/OUT

Part Name 名称	Structure and Material 结构及材料
Resonator 谐振体	Dielectric Material LTCC 介质材料
In/Output Terminals 输入/输出	Ag/Ni/Sn
Ground Base 接地面	Ag/Ni/Sn

4 测试条件 Testing Conditions

除非另有规定，否则在以下条件下测试 <Unless otherwise specified>

温度 Temperature : Ordinary Temperature (-40 to 85℃)

湿度 Humidity : Ordinary Humidity (25 to 85% RH)

大气压强 Atmospheric Pressure : 86 to 106 kPa

当对测量结果有疑问时<In case of doubt>

温度 Temperature : 20±2℃

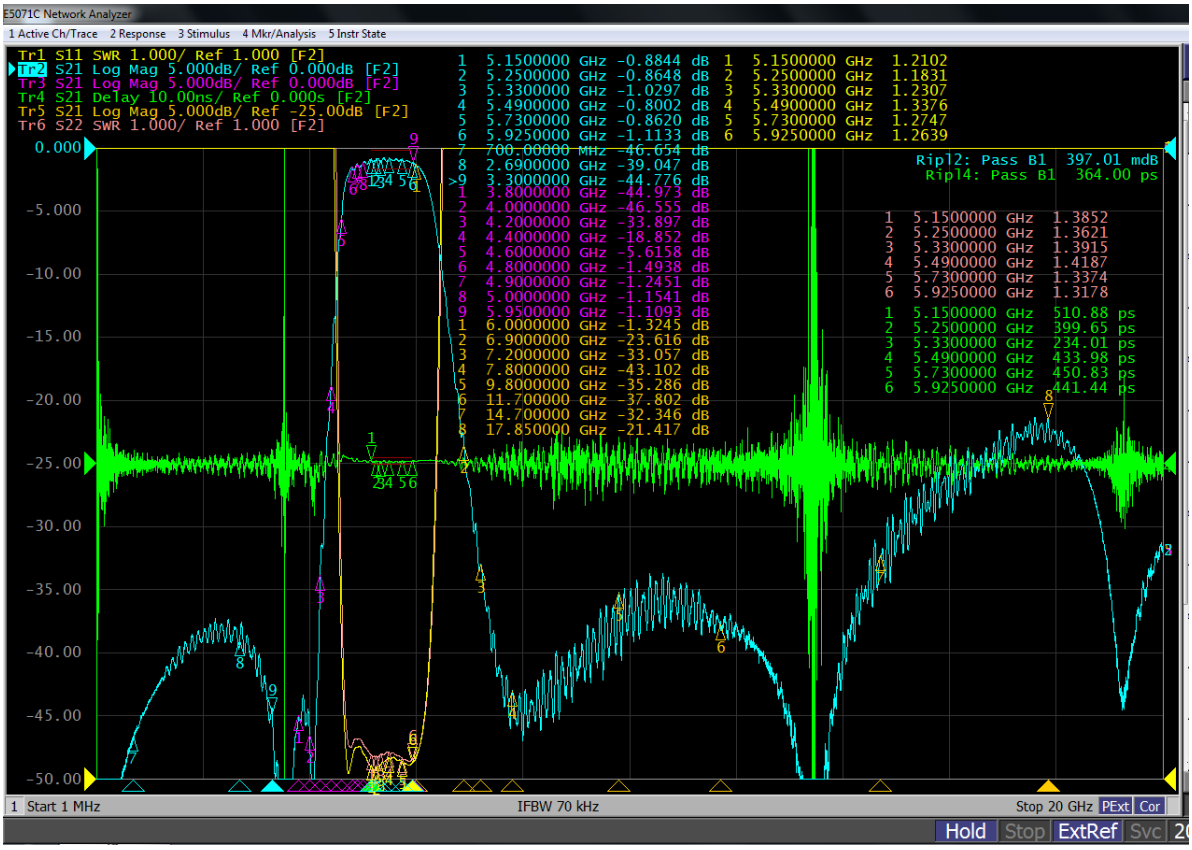
湿度 Humidity : 60 to 75% RH

大气压强 Atmospheric Pressure : 86 to 106 kPa

5 电气性能 Electrical Characteristics

参数 Parameter	符号 Symbol	需求规格 Spec Requirement			备注
		下限值 Min	典型值 Typ	上限值 Max	
Frequency Range	MHz	5150		5925	
Insertion loss(dB)	5150-5250MHz	/	1.0	1.5	常温(25°C)
	5250-5330MHz	/	1.0	1.5	
	5490-5730MHz	/	1.0	1.5	
	5730-5925MHz	/	1.0	1.5	
	5150-5250MHz	/		1.7	-30~+85℃
	5250-5330MHz	/		1.7	
	5490-5730MHz	/		1.7	
	5730-5925MHz	/		1.7	
Input port impedance	Ohm	/	50	/	
Output port impedance	Ohm	/	50	/	
VSWR (in/out)	/			2.0	
Absolute attenuation(dB)	700-2690MHz	35	/	/	Sub-3GHz
	3300-3800MHz	28	/	/	N77/N78
	3800-4000MHz	28	/	/	N77/N78/L
	4000-4200MHz	28	/	/	N77/N78/H
	4400-4600MHz	3.5	/	/	N79
	5950-6000MHz	10	2.3	/	不强制满足，需罗列
	6000-6900MHz	10	3.8	/	不强制满足，需罗列
	6900-7200MHz	8			
	7200-7800MHz	20			
	7800-9800MHz	18			
	9800-11700MHz	20			
	14700-17850MHz	15			
Power Capacity	33dBm Max.				
工作温度	-40~85℃				
存储温度	-40~85℃				

6 特性曲线 Characteristic Curve



7 焊接条件 Recommended Soldering Conditions

1、焊剂 Flux, Solder

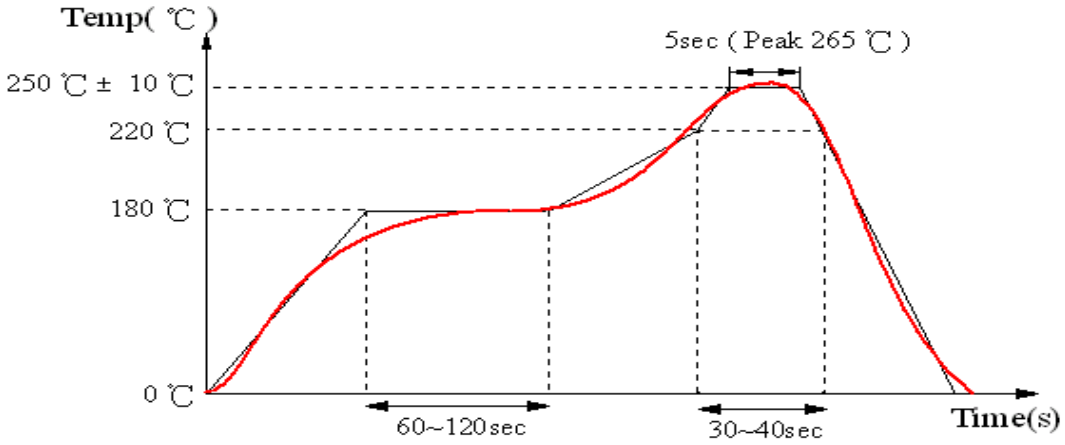
① 使用松香助焊剂，禁止使用卤化物含量起过 0.2wt%的强酸性助焊剂。

Use rosin-based flux. Don't use highly acidic flux with halide content exceeding 0.2wt% (chlorine conversion value).

② 使用纯锡焊料 Use Sn solder.

2、回流焊条件 Reflow soldering conditions

●预热时，产品表温与焊料温度的温差最大不允许超出 150℃，焊接完后冷却时，产品表温与溶剂温度之间的温差最大不允许超出 100℃。预热不足有可能引发产品表面裂纹，导致产品品质下降。Pre-heating should be in such a way that the temperature difference between solder and product surface is limited to 150℃ max. Cooling into solvent after soldering also should be in such a way that temperature difference is limited to 100℃ max. Unwrought pre-heating may cause cracks on the product, resulting in the deterioration of products quality.



●标准回流焊曲线 Standard soldering profile.

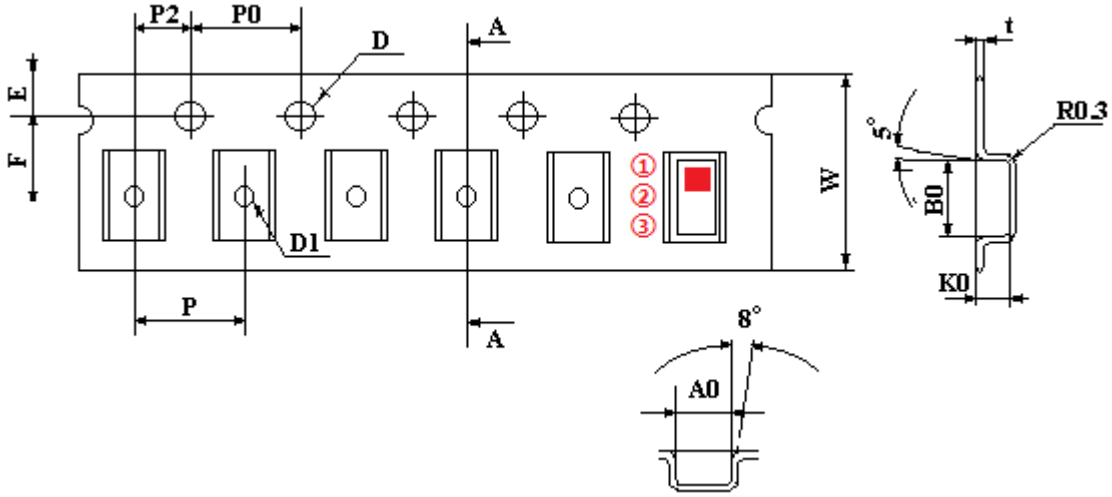
3、手工返工 Reworking with soldering iron

当使用电烙铁进行手工焊接时，以下条件必须严格遵守 The following conditions must be strictly followed when using a soldering iron.

预热 Pre-heating	150℃, 1 minute
尖端温度 Tip temperature	350℃ max
输出功率 Soldering iron output	80w max
电烙铁头尖端尺寸 End of soldering iron	φ3mm max
焊接时间 Soldering time	3 seconds max

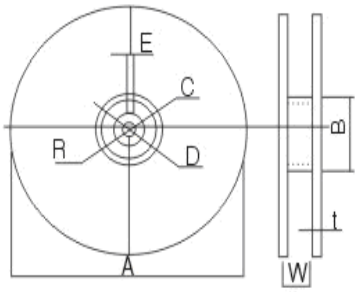
8 包装 Packaging

①编带尺寸 Dimensions of Tape:



W	P	E	F	P2	D	D1
8.00+0.30/-0.10	4.00±0.10	1.75±0.10	3.50±0.05	2.00±0.05	1.50+0.10/-0.00	0.70+0.25/-0.10
P0	10P0	A0	B0	K0	T	Tape Material
4.00±0.10	40.00±0.20	0.95±0.10	1.82±0.10	0.75±0.10	0.22±0.05	塑带 plastic carrier tape

②带轮尺寸 Dimensions of Reel



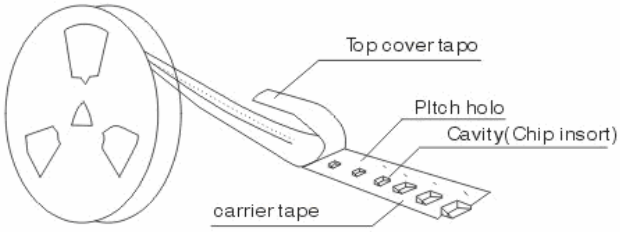
Reel material: PS (Polystyrene)

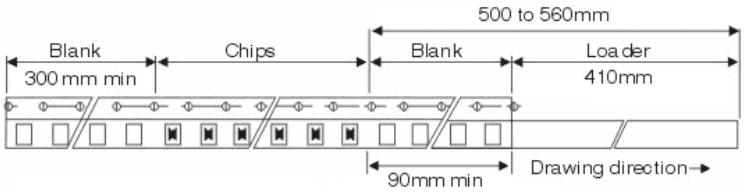
A	178±2
B	60±2
C	13.0±0.5
D	21.0±0.8
E	2.0±0.5
W	8.5±1.0
t	1.2±0.2
R	1.0±0.25

③编带抗拉强度 Pulling strength of tapes:

载带 Carrier tape	10N or more (1kgf or more)
上盖带 Cover tape	5N or more (1kgf or more)

④编带简图及拉伸方向 Taping figure and drawing direction:





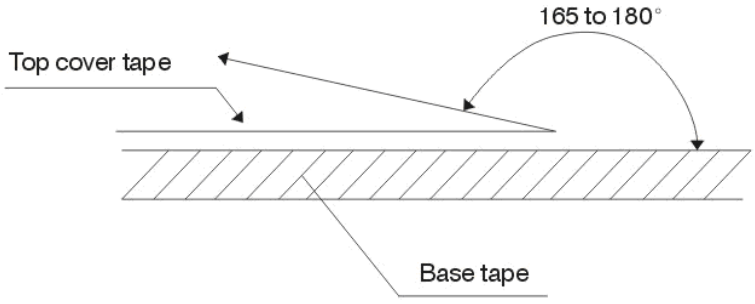
编带材料 Tape material:

基带 Base tape: 塑带 plastic carrier tape

盖带 Cover tape: 聚乙烯 polyethylene

⑤盖带的剥离强度 Peeling strength of cover tape:

盖带 Cover tape	0.2~0.6N (20gf~60gf)



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%.

⑥ 包装数量 Packaging quantities: 4000 PCS / Reel