

客户 CUSTOMER:

日期 DATE:

纳入仕様书 SPECIFICATION

产 品 名 称 PRODUCT NAME: 阻抗转换器

贵 司 料 号 YOUR PART NO.:

敝 司 料 号 OUR PART NO.: MGMB18H1-3350B40X

版 本 号 VERSION.: V2.1

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

本纳入仕様书共 9 页

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纳入仕様书改定履历 MODIFY HISTORY OF SPECIFICATION

Ver.	DATE	CONTENT	APPROVED
1.0	2019.05.07	初稿 Constitute	梁启新
1.1	2019.08.12	更新工作温度 Modify Operating Temperature Range	梁启新
2.0	2020.06.03	更新回流焊温度曲线 Modify Reflow Temperature Curve	付迎华
2.1	2020.07.15	更新顶部焊盘形状 Update the Top Pad Shape	付迎华

目录 CATALOG

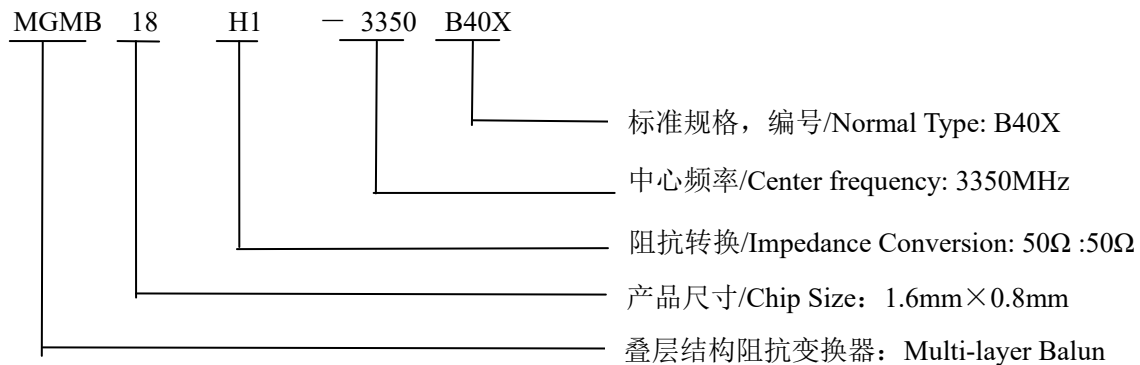
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1 适用范围 Scope

麦捷微波阻抗转换器MGMB系列产品设计用于5G、LTE、WIFI、Bluetooth、DVD和无绳电话机中，具有低的插入损耗和小体积SMD片式设计，能减少复杂的调校工作，可以简化电路设计。

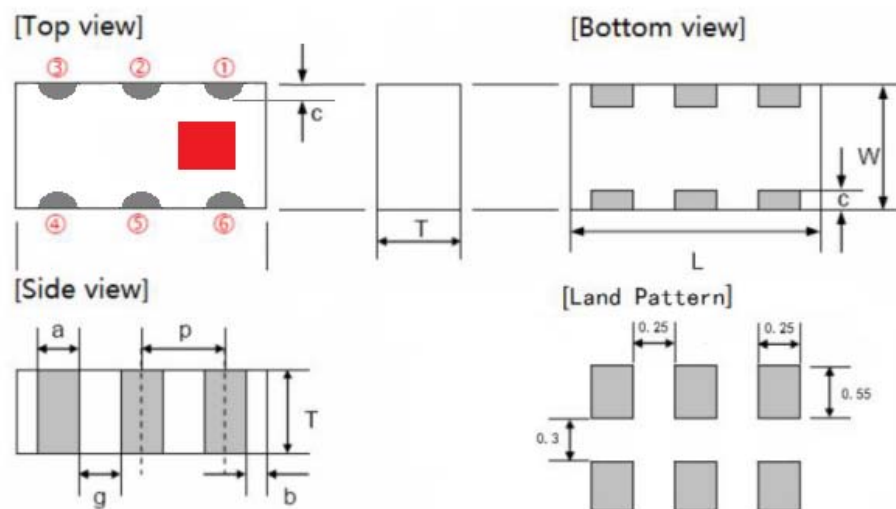
Microgate Microwave Balun MGMB series are designed to be used in 5G、LTE、WIFI、Bluetooth、DVD & cordless phones with low insertion loss and small size SMD chip design , which can simplify your complex tuning and circuit design .

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	g	p
1.6±0.1	0.8±0.1	0.7max	0.2±0.1	0.2±0.1	0.15±0.1	0.3±0.1	0.5±0.05

Pin configuration

1	2	3	4	5	6
Unbalance Port	GND(DC Feed)	Balance Port	Balance Port	GND	NC

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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 银+ Ni 镍/Sn 锡
Ground Base 接地面	Ag 银+ Ni 镍/Sn 锡

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°C)

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

大气压强 Atmospheric Pressure : 86 to 106 kPa

5 电气性能 Electrical Characteristics

湿敏等级: MSL1

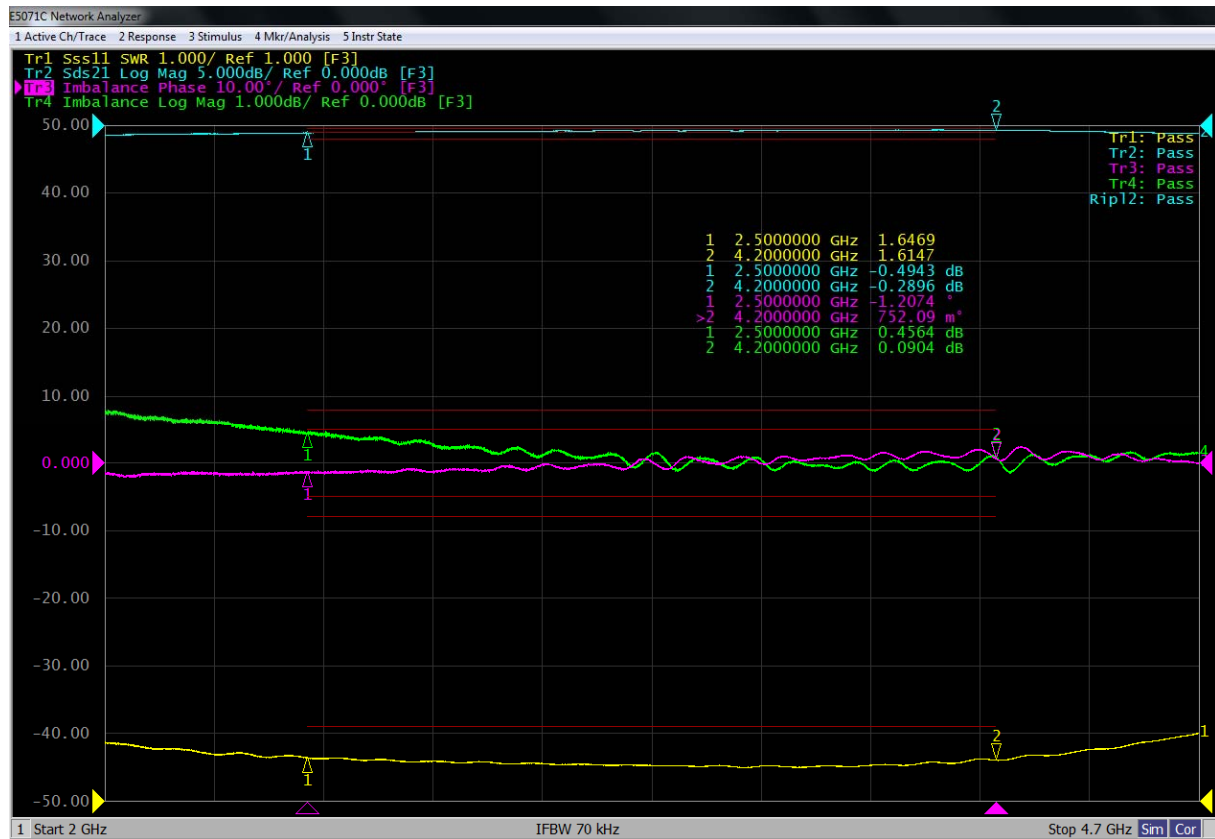
静电防护能力: Human Body Model (HBM) : 1000V @25±5°C

Machine Model (MM) : 100V @25±5°C

功率容量 Power Capacity: 1W Max.

规格参数 Parameter	单位 Unit	性能规格		
		下限值 Min	典型值 Typ	上限值 Max
★频率范围 Frequency Range	MHz	2500	/	4200
★插损(BW) Insertion loss	dB	/	/	1.0
带内波动 Amplitude Ripple	dB	/	/	0.3
驻波 (BW) VSWR	/	/	/	2.0
★幅度不平衡度(BW) (Amplitude Imbalance)	dB	/	0.4	0.8
★相位平衡度(BW) (Phase Imbalance)	度	/	/	5

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超过 0.2wt% 的强酸性助焊剂。

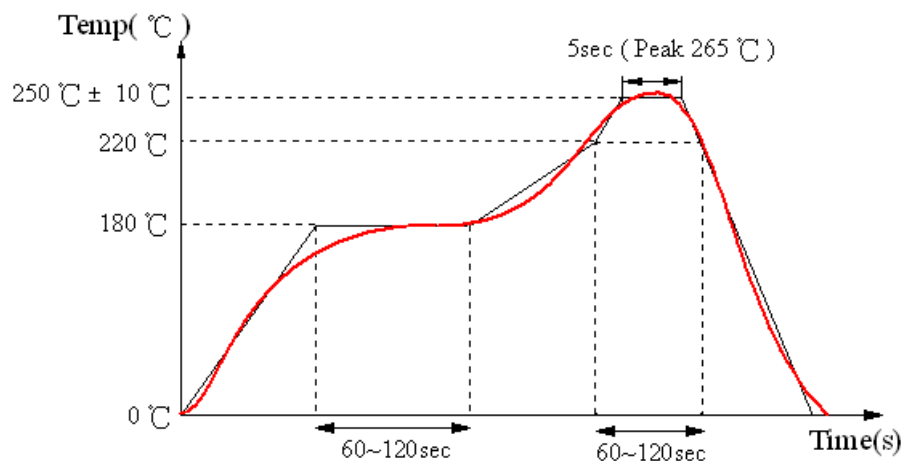
Use rosin-based flux. Don't use highly acidic flux with halide content exceeding 0.2wt% (chlorine conversion value).

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.

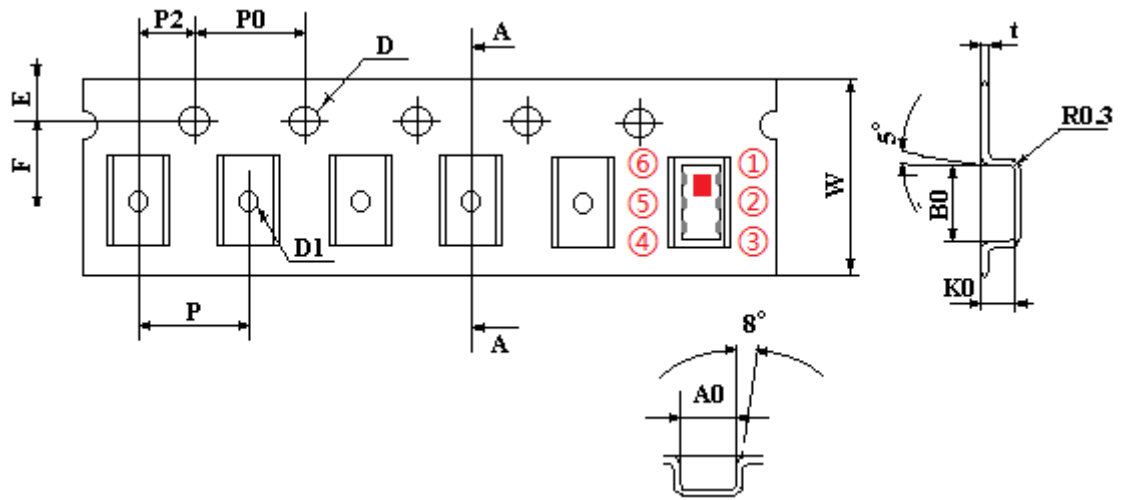
3、手工返工 Reworking with soldering iron

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°C, 1 minute
尖端温度 Tip temperature	350°C 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:

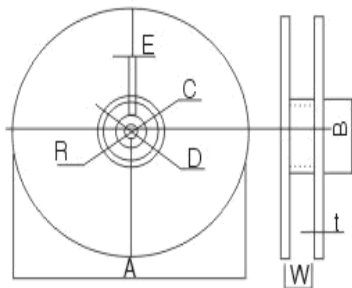


Unit: mm

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

Unit: mm



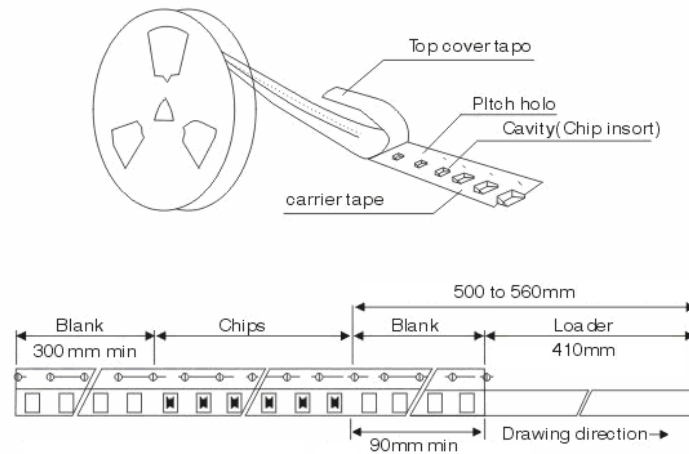
Reel material: PS (Polystyrene)

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:



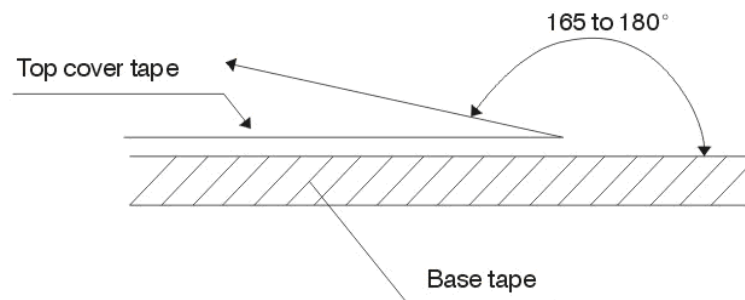
编带材料 Tape material:

基带 Base tape: 纸带 cardboard

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)
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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