

客户 Customer: \_\_\_\_\_

日期 DATE: \_\_\_\_\_

**Preliminary**

# 纳入仕様书 SPECIFICATION

产品名称 PRODUCT NAME: 叠层宽带片式耦合器

Multilayer Broadband Chip Coupler

贵司料号 YOUR PART NO.: \_\_\_\_\_

敝司料号 OUR PART NO.: MGMC18H0823G24-C66

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

本纳入仕様书共 6 页

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

Ver.	DATE	CONTENT	APPROVED
1.0	2020.03.07	初稿 Constitute	梁启新

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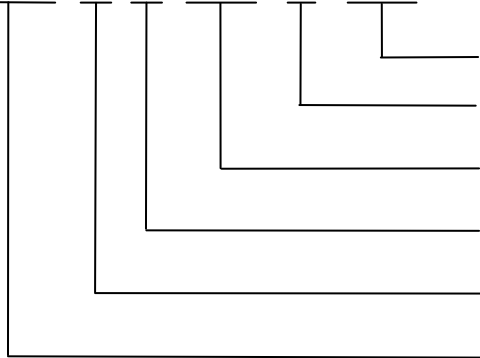
## 1 适用范围 Scope

“麦捷”叠层片式耦合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、高的隔离度和小体积 SMD 片式设计，能减少复杂的调校工作，可以简化电路设计。

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

## 2 品名构成 Product Identification

MGMC 18 H 0823G 24 -C66



标准规格, 编号 C66/Normal Type: C66

耦合度/Coupling: 24.0dB

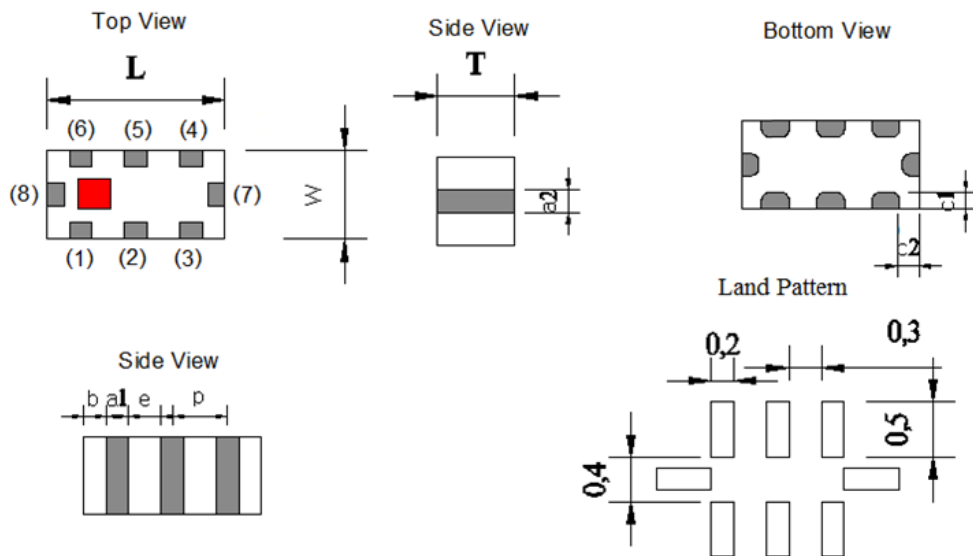
频率/Frequency: 0.8GHz/2.3GHz

设计结构/Design series: H: via design series 过孔设计系列

产品尺寸/Chip Size: 1.6mm×0.8mm

叠层宽带片式耦合器/Multilayer Chip Coupler

## 3 形状、尺寸 Appearance and Dimensions



Terminal Configuration							
①	RF1 Input/Output	②	CPL2_RF1	③	CPL2_RF2	④	GND
⑤	RF2 Output/Input	⑥	CPL1_RF2	⑦	CPL1_RF1	⑧	GND

Mark	L	W	T	a1	a2
Dimensions(mm)	1.6±0.1	0.8±0.1	0.5 Max.	0.2±0.1	0.2±0.1
Mark	b	c1	c2	e	p
Dimensions(mm)	0.20±0.15	0.15±0.10	0.15±0.10	0.3±0.1	0.5±0.1

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#### 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

操作温度范围 Operating Temperature Range : -40 to +85°C

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

No	Item	Specifications	
1	Frequency Range (MHz)	699~2690MHz	
2	Insertion Loss(dB)	699 ~ 960MHz	0.15max.@ +25°C 0.25max.@ -40 ~ +85°C
		1000 ~ 2025MHz	0.25max.@ +25°C 0.35max.@ -40 ~ +85°C
		2110 ~ 2690MHz	0.36max.@ +25°C 0.46max.@ -40 ~ +85°C
3	Ripple across freq band (dB)	699 ~ 746 MHz	0.1 max.
		791 ~ 862 MHz	0.1 max.
		824 ~ 960 MHz	0.1 max.
		1710 ~ 2170 MHz	0.1 max.
		2500 ~ 2690 MHz	0.1 max.
3	Coupling Value(dB)	28 ~ 30 dB@ 699MHz	
		25 ~27 dB@915MHz	
		20 ~ 22 dB@1710MHz	
		19.5 ~ 21.5 @ 1880 MHz	
		19 ~ 21@ 2025 MHz	
		18 ~ 20@ 2300 MHz	
		17~ 19@ 2690 MHz	
4	Directivity (dB)	699 ~ 2690 MHz	18 min.
5	Coupling ratio mismatch between Coupler branch 1 and Coupler branch 2	±1 dB	
6	V.S.W.R	1.5 max.	
7	Characteristics Impedance	50 ohm (Nominal)	

## 6 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).

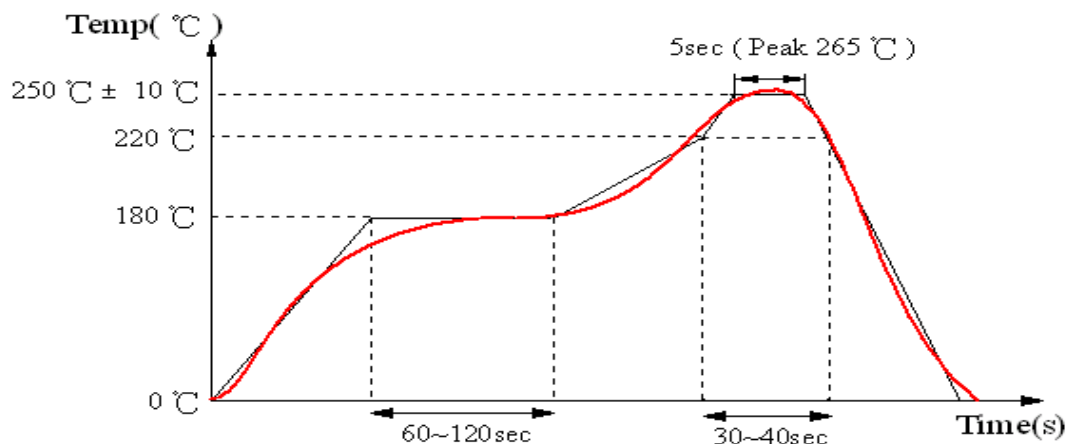
② 使用纯锡焊料 Use Sn solder.

### 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