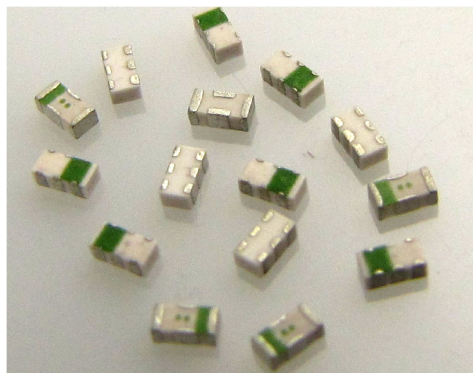


## Multilayer Chip Balun 叠层片式阻抗转换器

### FEATURES 特点

- Multilayer monolithic construction yields high reliability  
独石结构生产可靠性
- Low insertion loss and small size SMD chip design  
低插入损耗和小体积SMD片式设计
- Can simplify your complex tuning and circuit design  
能减少复杂的调校工作，简化电路设计



### APPLICATIONS 应用

- WLAN IEEE 802.11b~g and Bluetooth module. 无线局域网 IEEE802.11b~g 和蓝牙模块
- RF and Wireless Communication system. 射频和无线通讯系统

### Product Identification 产品标识

MGMB     21     H     2     -     2450     B05  
①            ②            ③            ④                       ⑤            ⑥

- ① Series name 系列名称
- ② Dimension 产品尺寸 L×W: 【21: 2.0mm×1.25mm 18: 1.6mm×0.8mm】
- ③ Design series 设计结构: [H: via design series 过孔设计系列 P: plane design series 平面设计系列]
- ④ Impedance Conversion 阻抗转换 unit: [1=50Ω:50Ω 2=50Ω:100Ω 3=50Ω:200Ω]
- ⑤ center frequency 中心频率: 2450MHz
- ⑥ Balance type 编号及产品标识号

### Product Specification 产品规格简表

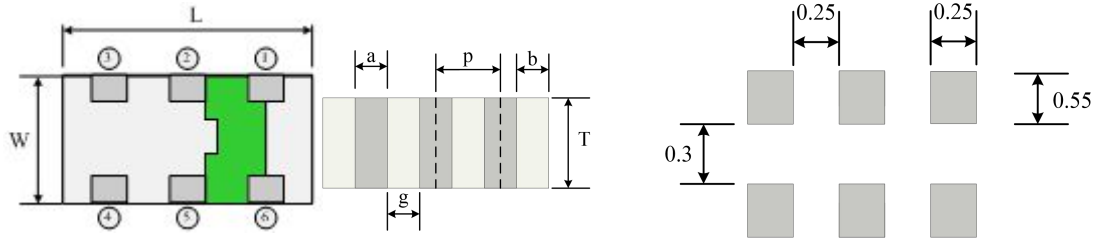
Part No. 产品型号	Dimensions 尺寸 L×W(mm)	Unbalance Port Impedance 不平衡端阻抗(Ω)	Balance Port Impedance 平衡端阻抗(Ω)	Center Frequency 中心频率 fo (MHz)	Insertion Loss 插入损耗 (dB)
MGMB18H3-2450B08	1.6×0.8	50	200 (100+100)	2450	1.2max.(at 25 ° C)
MGMB18H1-2450B12	1.6×0.8	50	50 (25+25)	2450	1.2max.(at 25 ° C)
MGMB15H2-2450B18	1.0×0.5	50	100 (50+50)	2500	0.6max.(at 25 ° C)
MGMB0605H2-2500B19	0.6×0.5	50	100 (50+50)	2500	0.6max.(at 25 ° C)
MDBF21L914H1897M -DB01	2.0×1.25	50	200 (100+100)	914.5	1.8 max.(at 25 ° C)
				1897.5	1.9 max.(at 25 ° C)
MDBF21L914H1897M -DB02	2.0×1.25	50	200 (100+100)	914.5	1.2 max.(at 25 ° C)
				1897.5	1.6 max.(at 25 ° C)

# Multilayer Chip Balun 叠层片式阻抗转换器

Part No. 产品型号: MGMB18H3-2450B08

## 1. Dimensions 外形尺寸 (Unit: mm)

① Unbalance Port    ②⑤ NC    ③ GND or DC feed    ④⑥ Balance Port



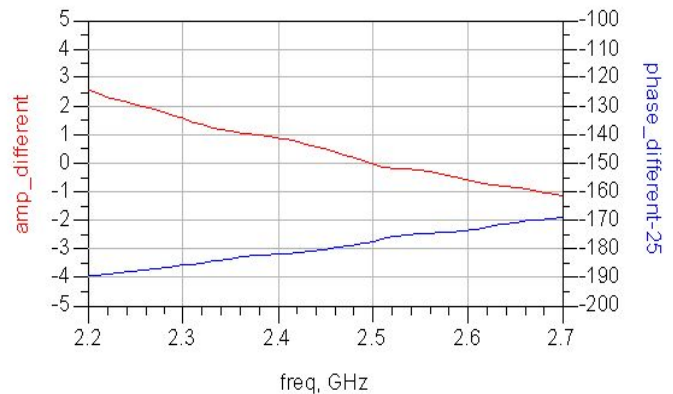
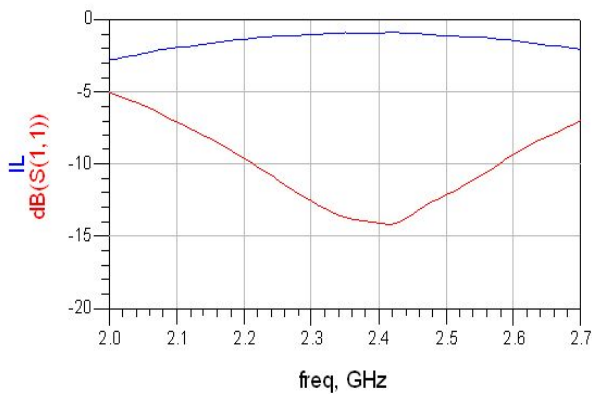
Dimensions and Land Pattern

Mark	W	L	T	a	b	g	p
Dimensions(mm)	0.8±0.1	1.6±0.1	0.6±0.1	0.2±0.1	0.2±0.1	0.3±0.1	0.5±0.1

## 2. Electrical Characteristics 电气性能

No.	Item (项目)	Specifications (特性)
1	Frequency Range 频率范围	2400~2500 MHz
2	Insertion Loss 插入损耗	≤1.2dB (at 25°C±5°C)
		≤1.5dB (at -40°C~85°C)
3	Unbalanced Impedance 不平衡端阻抗	50 Ω
4	Balanced Impedance 平衡端阻抗	200 Ω (100 Ω+100 Ω)
5	V.S.W.R (in BW) 驻波比	≤2.0
6	Amplitude Difference 平衡输出差	≤2.0 dB
7	Phase Difference 相位差	180±10 Deg

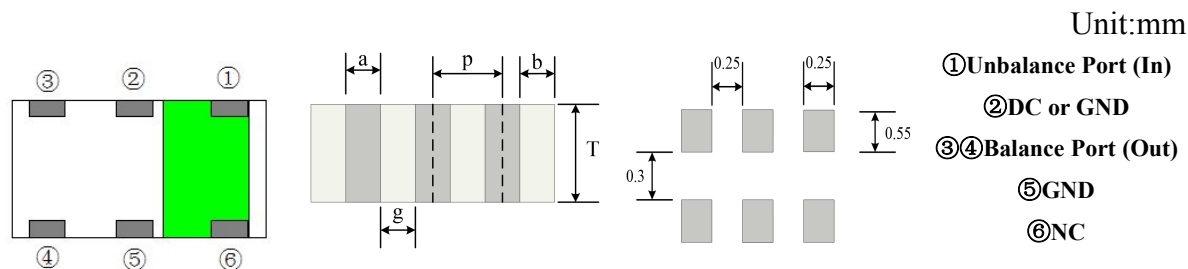
## 3. Characteristic curve 特性曲线



# Multilayer Chip Balun 叠层片式阻抗转换器

Part No. 产品型号: MGMB15H4-2450B12

## 1. Dimensions 外形尺寸 (Unit: mm)

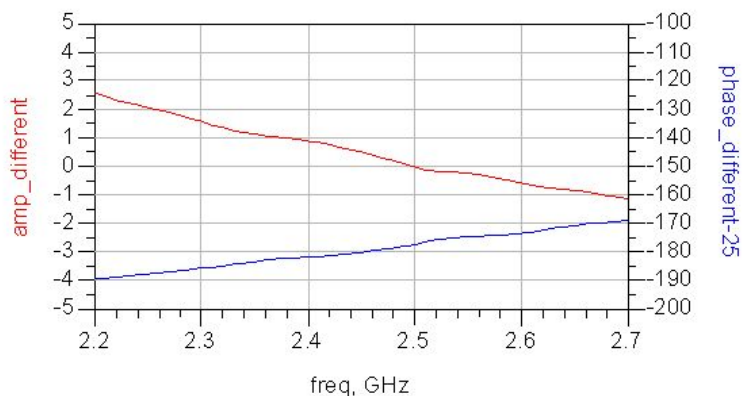
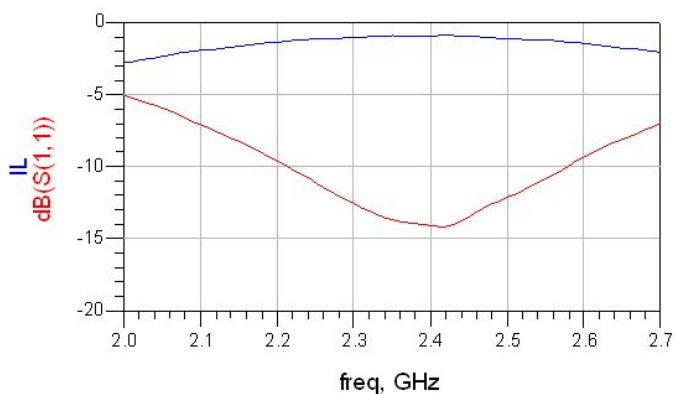


Mark	W	L	T	a	b	g	p
Dimennsion	0.8±0.1	1.6±0.1	0.6±0.1	0.2±0.1	0.2±0.1	0.3±0.1	0.5±0.1

## 2. Electrical Characteristics 电气性能

No.	Item (项目)	Specifications (特性)
1	Frequency Range 频率范围	2400~2500 MHz
2	Insertion Loss 插入损耗	≤1.4dB (at 25°C±5°C)
		≤1.7dB (at -40°C~85°C)
3	Unbalanced Impedance 不平衡端阻抗	50 Ω
4	Balanced Impedance 平衡端阻抗	Conjugate to Atheros IC
5	V.S.W.R (in BW) 驻波比	≤2.0
6	Amplitude Difference 平衡输出差	≤2.0 dB
7	Phase Difference 相位差	180±10 Deg

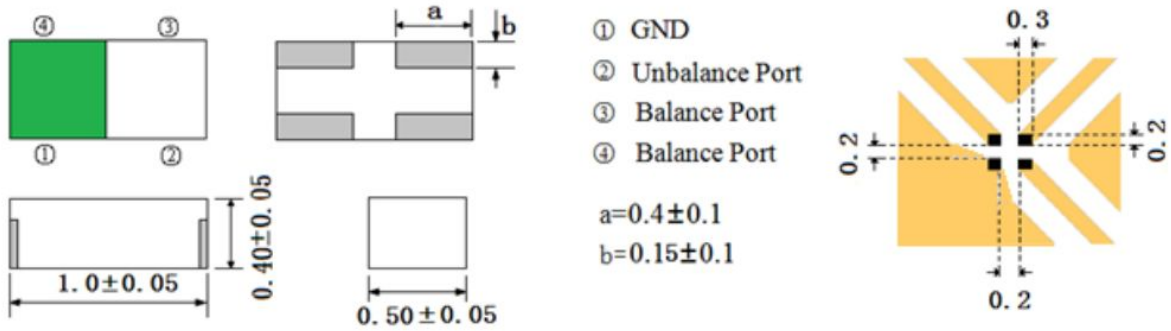
## 3. Characteristic curve 特性曲线



# Multilayer Chip Balun 叠层片式阻抗转换器

Part No. 产品型号: MGMB15H2-2450B18

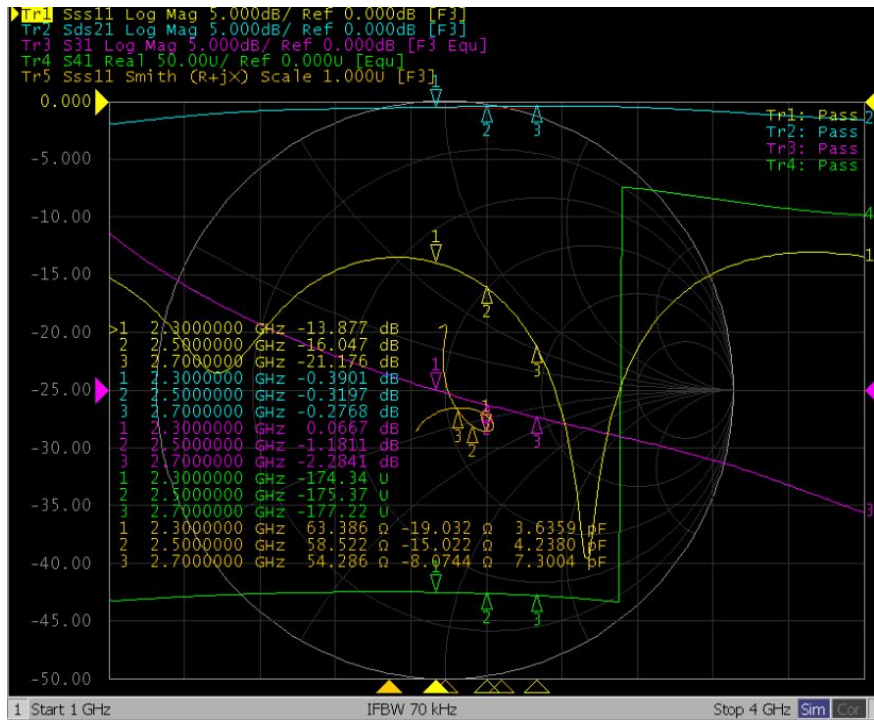
## 1. Dimensions 外形尺寸 (Unit: mm)



## 2. Electrical Characteristics 电气性能

Frequency Range (MHZ) 频率范围	Insertion Loss(dB) 插入损耗	Unbalance Impedance ( $\Omega$ )	Balance Impedance ( $\Omega$ )	V.S.W.R (in BW) 驻波比	Amplitude difference (dB) 平衡输出差	Phase difference (Deg) 相位差
2300~2690	0.6dB Max.	50	100	$\leq 2.0$	$0\pm 2.5$ dB	$180\pm 10$

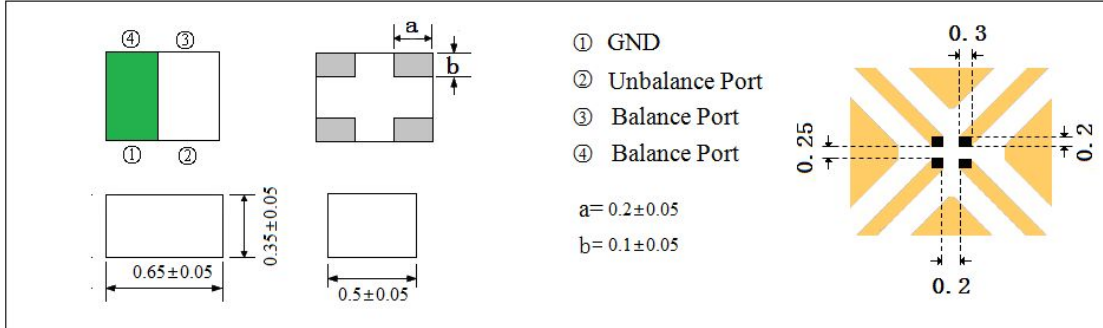
## 3. Characteristic curve 特性曲线



# Multilayer Chip Balun 叠层片式阻抗转换器

Part No. 产品型号: MGMB0605H2-2450B19

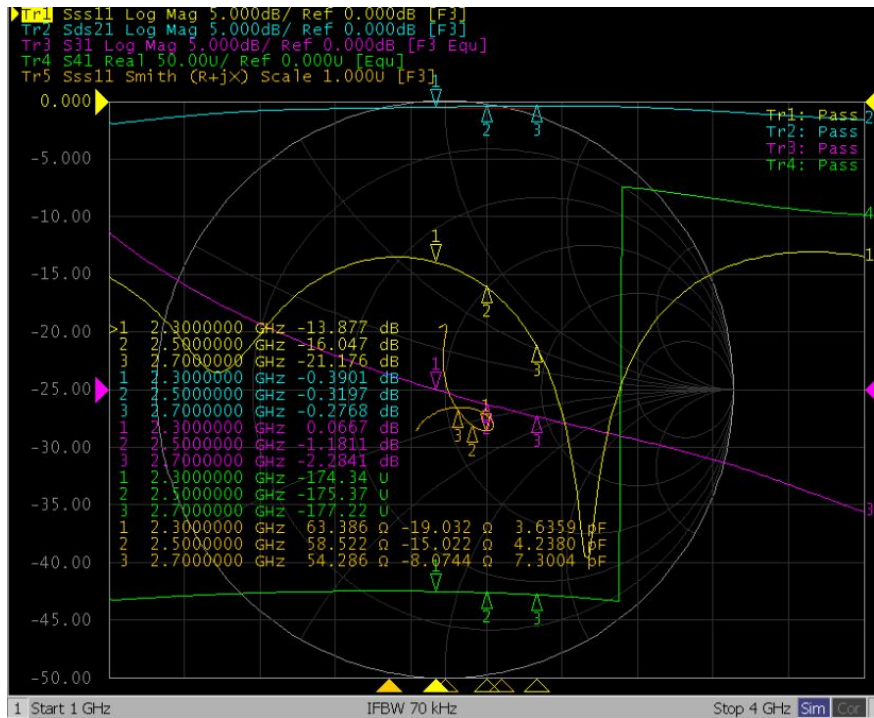
## 1. Dimensions 外形尺寸 (Unit: mm)



## 2. Electrical Characteristics 电气性能

Frequency Range (MHZ) 频率范围	Insertion Loss(dB) 插入损耗	Unbalance Impedance ( $\Omega$ )	Balance Impedance ( $\Omega$ )	V.S.W.R (in BW) 驻波比	Amplitude difference (dB) 平衡输出差	Phase difference (Deg) 相位差
2300~2690	0.6dB Max.	50	100	$\leq 2.0$	$0 \pm 2.5$ dB	$180 \pm 10$

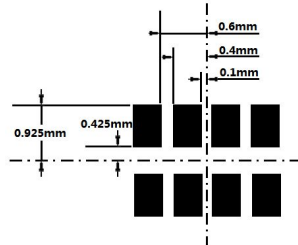
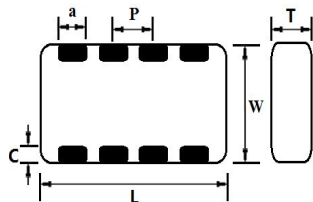
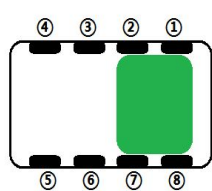
## 3. Characteristic curve 特性曲线



## Multilayer Chip Balun 叠层片式阻抗转换器

Part No. 产品型号: MDBF21L914H1897M-DB01

### 1. Dimensions 外形尺寸 (Unit: mm)



- ①GSM850/900  
(Unbalance Port)
- ④GSM1800/1900  
(Unbalance Port)
- ②③GND
- ⑦⑧GSM850/900  
(Balance Port)
- ⑤⑥GSM1800/1900  
(Balance Port)

Mark	W	L	T	a	P	C
Dimennsion	2.0±0.15	1.25±0.15	0.9±0.1	0.25±0.15	0.5±0.1	0.2±0.15

### 2. Electrical Characteristics 电气性能

#### GSM850/900 Rx

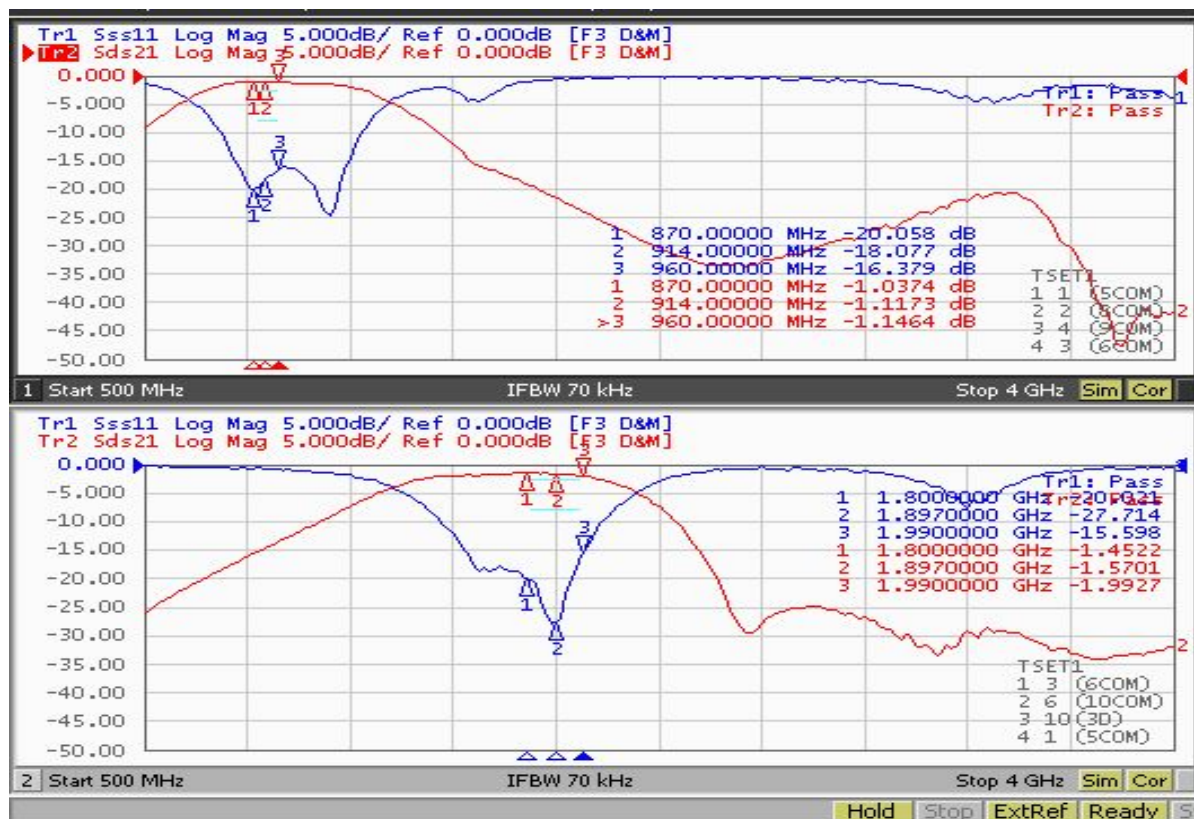
No.	Item (项目)	Specifications (特性)
1	Unbalance Port Impedance	50Ω
2	Balance Port Impedance	200Ω
3	Frequency Range 频率范围 (MHz)	914.50±45.50
4	Insertion Loss 插入损耗	≤1.8dB (at 25°C±5°C)
		≤2.1dB (at -40°C~85°C)
5	V.S.W.R at Unbalance Port (in BW) 不平衡端驻波比	≤1.40
6	V.S.W.R at Balance Port (in BW) 平衡端驻波比	≤1.44
7	Attenuation 阻带衰减	≥13.1dB (435~480 MHz) ≥16.4dB (1738~1920 MHz) ≥28dB (2607~2880 MHz) ≥22.3dB (2880~6000 MHz)
8	Phase difference 相位差	180±15 Deg.
9	Amplitude Balance 幅度平衡	≤1.95dB
10	Power Capacity 功率容量	500mW max

## Multilayer Chip Balun 叠层片式阻抗转换器

### GSM1800/1900 Rx

No.	Item (项目)	Specifications (特性)
1	Unbalance Port Impedance	50Ω
2	Balance Port Impedance	200Ω
3	Frequency Range 频率范围 (MHz)	1897.50±92.50
4	Insertion Loss 插入损耗	≤1.9dB (at 25°C±5°C)
		≤2.2dB (at -40°C~85°C)
5	V.S.W.R at Unbalance Port (in BW) 不平衡端驻波比	≤1.52
6	V.S.W.R at Balance Port (in BW) 平衡端驻波比	≤1.52
7	Attenuation 阻带衰耗	≥16.7dB (902.5~995 MHz)
		≥23.7dB (2400~2500 MHz)
		≥15.3dB (3610~3980 MHz)
		≥40.4dB (5415~5970 MHz)
8	Phase difference 相位差	180±15 Deg.
9	Amplitude Balance 幅度平衡	≤1.95dB
10	Power Capacity 功率容量	500mW max

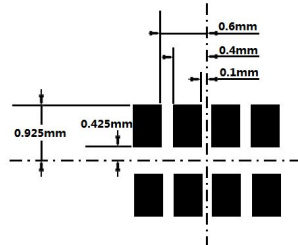
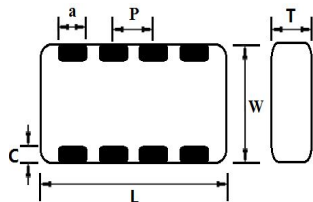
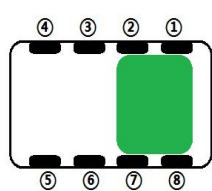
### 3. Characteristic curve 特性曲线



## Multilayer Chip Balun 叠层片式阻抗转换器

Part No. 产品型号: MDBF21L914H1897M-DB02

### 1. Dimensions 外形尺寸 (Unit: mm)



- ①GSM850/900  
(Unbalance Port)
- ④GSM1800/1900  
(Unbalance Port)
- ②③GND
- ⑦⑧GSM850/900  
(Balance Port)
- ⑤⑥GSM1800/1900  
(Balance Port)

Mark	W	L	T	a	P	C
Dimenension	2.0±0.15	1.25±0.15	0.9±0.1	0.25±0.15	0.5±0.1	0.2±0.15

### 2. Electrical Characteristics 电气性能

#### GSM850/900 Rx

No.	Item (项目)	Specifications (特性)
1	Unbalance Port Impedance	50Ω
2	Balance Port Impedance	200Ω
3	Frequency Range 频率范围 (MHz)	914.50±45.50
4	Insertion Loss 插入损耗	≤1.2dB (at 25°C±5°C)
		≤1.4dB (at -40°C~85°C)
5	V.S.W.R at Unbalance Port (in BW) 不平衡端驻波比	≤1.40
6	V.S.W.R at Balance Port (in BW) 平衡端驻波比	≤1.44
7	Attenuation 阻带衰减	≥13.1dB (435~480 MHz) ≥16.4dB (1738~1920 MHz) ≥28dB (2607~2880 MHz) ≥22.3dB (2880~6000 MHz)
8	Phase difference 相位差	180±15 Deg.
9	Amplitude Balance 幅度平衡	≤1.95dB
10	Power Capacity 功率容量	500mW max



## Multilayer Chip Balun 叠层片式阻抗转换器

### GSM1800/1900 Rx

No.	Item (项目)	Specifications (特性)
1	Unbalance Port Impedance	50Ω
2	Balance Port Impedance	200Ω
3	Frequency Range 频率范围 (MHz)	1897.50±92.50
4	Insertion Loss 插入损耗	≤1.6dB (at 25°C±5°C)
		≤1.8dB (at -40°C~85°C)
5	V.S.W.R at Unbalance Port (in BW) 不平衡端驻波比	≤1.52
6	V.S.W.R at Balance Port (in BW) 平衡端驻波比	≤1.52
7	Attenuation 阻带衰减	≥16.7dB (902.5~995 MHz)
		≥23.7dB (2400~2500 MHz)
		≥15.3dB (3610~3980 MHz)
		≥40.4dB (5415~5970 MHz)
8	Phase difference 相位差	180±15 Deg.
9	Amplitude Balance 幅度平衡	≤1.95dB
10	Power Capacity 功率容量	500mW max

### 3. Characteristic curve 特性曲线



注意事项: 本产品资料由于受篇幅限制, 只提供了相关基本信息; 同时由于产品资料在不断更新中, 因此在您希望订购或详细了解产品相关资料时, 请及时联系麦捷科技以获得最新、最全的产品资料。