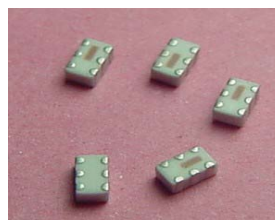


# Multilayer Chip Couplers With Lowpass Filters

## Features

- Monolithic SMD with small, low-profile and light-weight type.
- High harmonics rejection with buried low-pass filters.



## Applications

- 0.8-6 GHz wireless communication systems, including DECT/PACS/PHS/GSM/DCS/PCS phones, WLAN card Bluetooth modules, etc.

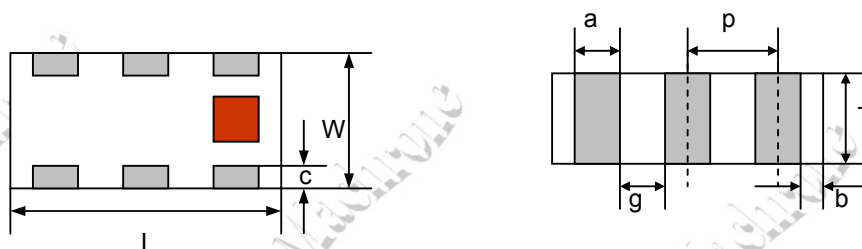
## Part Number Systems

**MCF - 2012 - 20 - A - 0897 - LF**

(1) (2) (3) (4) (5) (6)

(1)	Product series	(2)	Dimensions (L x W): 2.0 x 1.25 mm
(3)	Coupling: 20 = 20dB	(4)	Material code
(5)	Frequency Range: 0897 = 897MHz	(6)	ROHs Compliant

## Shape And Dimensions



Unit: mm

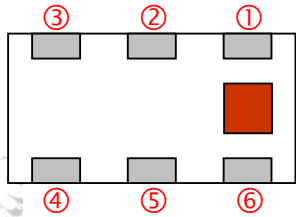
Type	L	W	T	a	b	c	g	p
2012	2.0 ± 0.1	1.25 ± 0.1	0.85 ± 0.1	0.3 ± 0.1	0.2 ± 0.1	0.3 + 0.1/-0.2	0.35 ± 0.1	0.65 ± 0.05

MCF-2012-Series				ELECTRICAL CHARACTERISTICS				
Part Number	Passband (MHz)	Insertion Loss (dB)	Return Loss (dB)	Coupling (dB)	Isolation (dB)	Att. @ 2 x fo (dB)	Att. @ 3 x fo (dB)	Power Capacity
MCF-2012-20-A-0897-LF	880 ~ 915	0.7 Max	14 Min	20 ± 1.2	25 Min	22 Min	17 Min	3W Max
MCF 2012-20-A-1747-LF	1710 ~ 1785	0.5 Max	14 Min	20 ± 1.0	25 Min	22 Min	17 Min	3W Max

\* All specifications are subjected to change without prior notice.

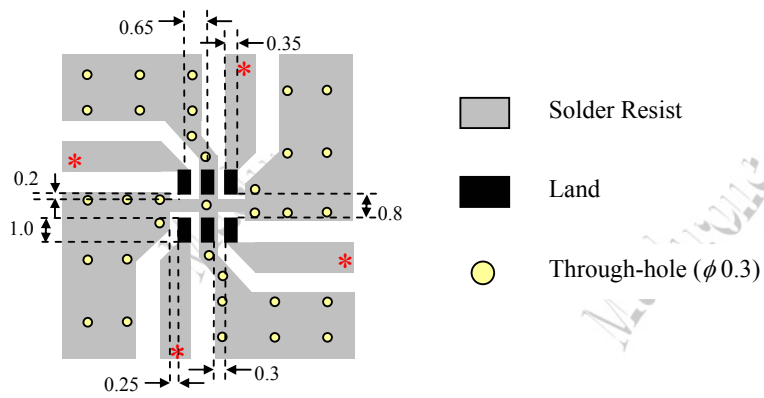
# Multilayer Chip Couplers With Lowpass Filters

## Terminal Configuration



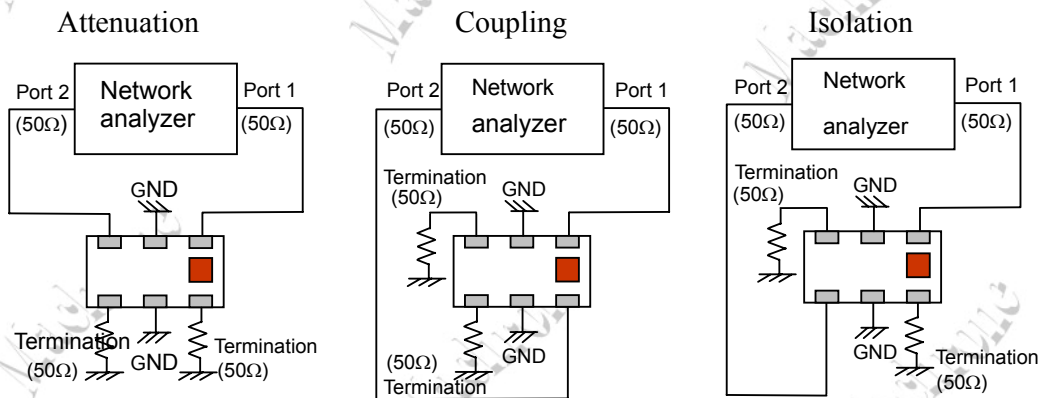
No.	Terminal Name	No.	Terminal Name
1	In	4	Termination
2	GND	5	GND
3	Main Out	6	Coupled Out

## Recommended PC Board Pattern (Unit: mm)



\* Line width should be designed to match  $50\ \Omega$  characteristic impedance, depending on PCB material and thickness.

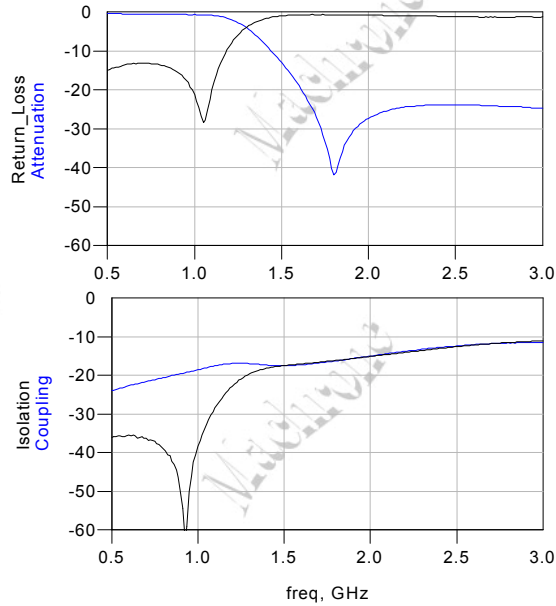
## Measuring Diagram



# Multilayer Chip Couplers With Lowpass Filters

## Typical Electrical Characteristics (Temperature = 25°C)

### ❖ MCF-2012-20-A-0897-LF



### ❖ MCF-2012-20-A-1747-LF

