MABA-009412-CF1BC0



1:1 Flux Coupled BalBal Transformer with separated center taps

5 - 120 MHz

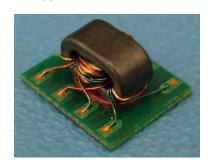
M/A-COM Products Part Status: Released Rev V1

Features

- **Surface Mount**
- 1:1 Impedance
- 75 Ohm
- **RoHS Compliant**

Description

M/A-COM's MABA-009412-CF1BC0 is a 1:1 BalBal flux coupled transformer in a low cost surface mount package. The 4 coils on this core are routed to separate pins on the carrier, so it may be configured for many different circuits. Ideally suited for high volume CATV application.



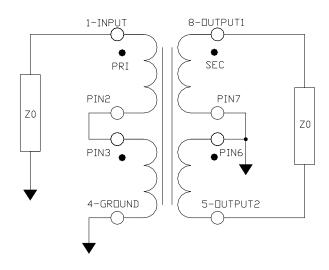
Pin Configuration

Function	Pin Number
Coil 1 dot (input)	1
Coil 1 (short to 3)	2
Coil 2 dot (short to 2)	3
Coil 2 (ground)	4
Coil 3 (output 2)	5
Coil 3 dot (ground)	6
Coil 4 (ground)	7
Coil 4 dot (output 1)	8

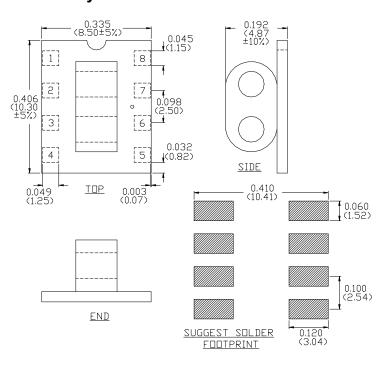
Ordering Information

Part Number	Package		
MABA-009412-CF1BC0	500 pieces per reel		
MABA-009412-CF1BTB	Customer test board		

Schematic



Case Style SM-193



Dimensions are inches (millimeters) ±0.015 (0.38) unless otherwise specified.

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- India Tel: +91.80.4155721 Visit www.macomtech.com for additional data sheets and product information.
- China Tel: +86.21.2407.1588

MABA-009412-CF1BC0



1:1 Flux Coupled BalBal Transformer with separated center taps

M/A-COM Products 5 - 120 MHz Part Status: Released Rev V1

Electrical Specifications: $T_A = 25$ °C, 0dBm, $Z_0 = 75\Omega$

Parameter	Test Conditions	Units	Min.	Тур.	Max.
Frequency Range	1 - 50 MHz				
Insertion Loss 1 (Pin 1 to Pin 8)	1 - 25 MHz 25 - 50 MHz	dB dB		0.2 0.5	0.4 0.8
Insertion Loss 2 (Pin 1 to Pin 5)	1 - 25 MHz 25 - 50 MHz	dB dB	_ _	0.2 0.3	0.4 0.6
Amplitude Un-Balance	1 - 25 MHz 25 - 50 MHz	dB dB		±0.04 ±0.23	±0.2 ±0.6
Phase Un-Balance	1 - 50 MHz	0	-	±0.6	±3.0
Input Return Loss (Pin 1)	1 - 10 MHz 10 - 25 MHz 25 - 50MHz	dB dB dB	20 16 12	25 22 17	- - -

Absolute Maximum Ratings

Parameter	Absolute Maximum		
RF Power	250mW		
DC Current	30mA		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-40°C to +85°C		

MABA-009412-CF1BC0



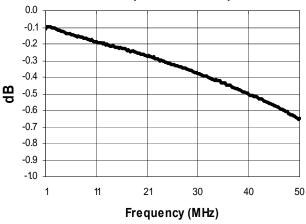
M/A-COM Products

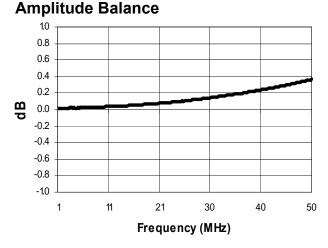
1:1 Flux Coupled BalBal Transformer with separated center taps

5 - 120 MHz Part Status: Released Rev V1

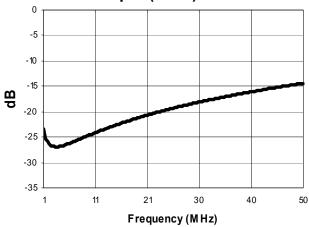
Typical Performance: $T_A = 25^{\circ}C$, 0dBm, $Z_0 = 75\Omega$

Insertion Loss 1 (Pin 1 - Pin 8)

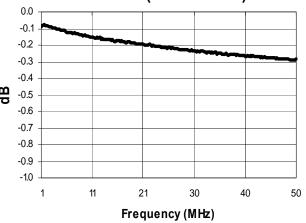




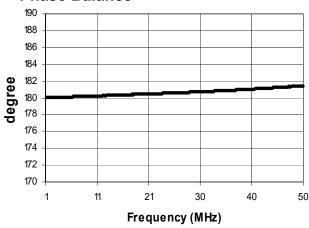
Return Loss: Input (Pin 5)



Insertion Loss 2 (Pin 1 - Pin 5)



Phase Balance



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