MABA-009109-CF1A40

1:1 Flux Coupled Balun Transformer
5 - 120 MHz

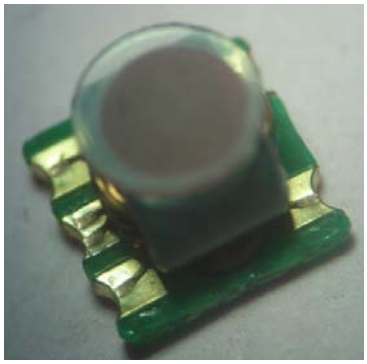
M/A-COM Products
Part Status: Released Rev V2

Features

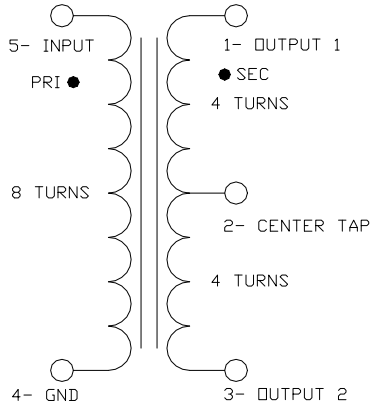
- Surface Mount
- 1:1 Impedance
- 75 Ohm
- RoHS Compliant

Description

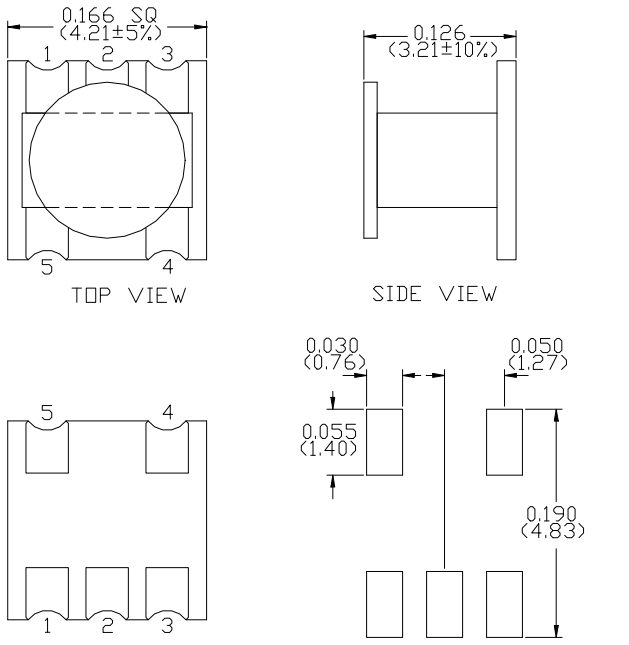
M/A-COM's MABA-009109-CF1A40 is a 1:1 RF flux coupled Transformer in a low cost surface mount package. Ideally suited for high volume CATV application.



Schematic



Case Style SM-164A



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

Pin Configuration

Function	Pin Number
Secondary Dot (Output 1)	1
Secondary Centre Tap	2
Secondary (Output 2)	3
Primary (Ground)	4
Primary Dot (Input)	5

Ordering Information

Part Number	Package
MABA-009109-CF1A40	2000 pieces per reel
MABA-009109-CF1ATB	Customer test board

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

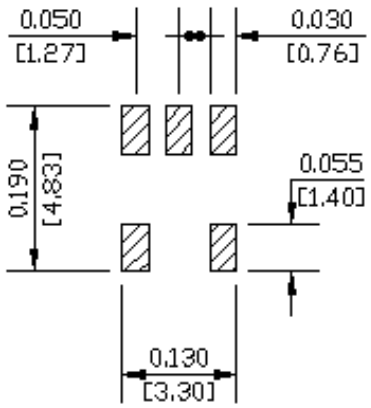
Electrical Specifications: T_A = 25°C, 0dBm, Z_0 = 75Ω

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range	5 – 120 MHz				
Insertion Loss 1 (Pin 5 to Pin 1)	5 – 75 MHz 75 – 120 MHz	dB dB	– –	0.1 0.3	0.4 0.6
Insertion Loss 2 (Pin 5 to Pin 3)	5 – 75 MHz 75 – 120 MHz	dB dB	– –	0.2 0.4	0.4 0.5
Amplitude Un-Balance	5 – 75 MHz 75 – 120 MHz	dB dB	– –	±0.03 ±0.12	±0.17 ±0.38
Phase Un-Balance	5 – 75 MHz 75 – 120 MHz	° °	– –	±0.05 ±0.10	±2.0 ±3.0
Input Return Loss (Pin 5)	5 – 75 MHz 75 – 120 MHz	dB dB	20 15	28 19	– –

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Power	250mW
DC Current	30mA
Operating Temperature	-40°C to +100°C
Storage Temperature	-40°C to +100°C

Recommended PCB Configuration



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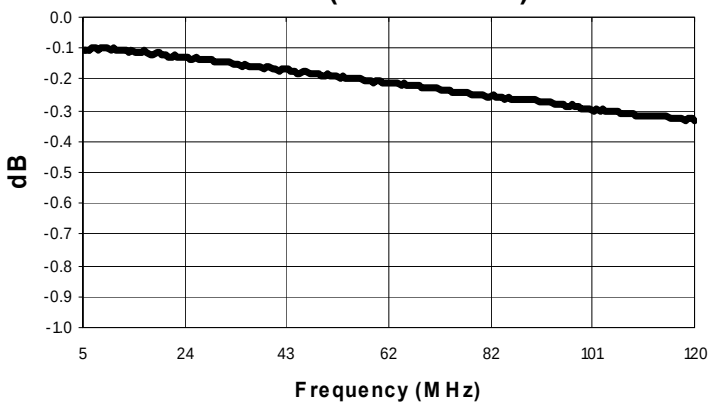
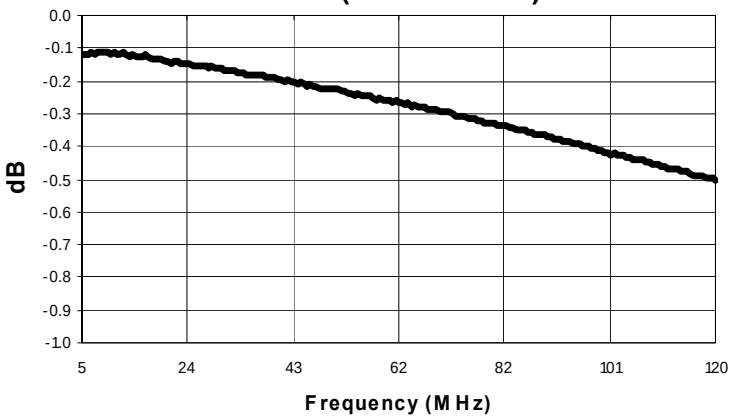
Typical Performance: T_A = 25°C, 0dBm, Z_0 = 75Ω

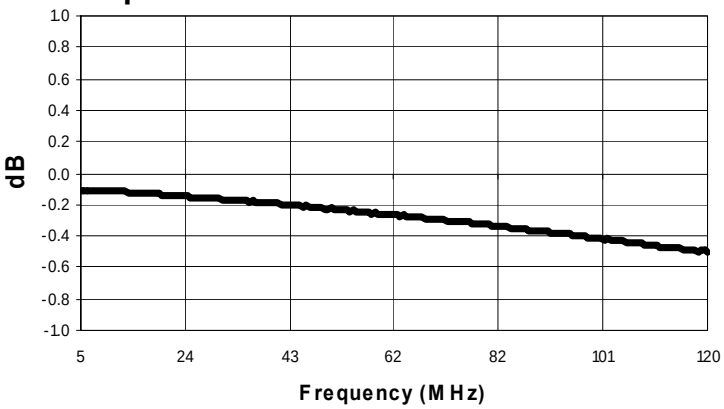
Insertion Loss 1 (Pin 5 - Pin 1)



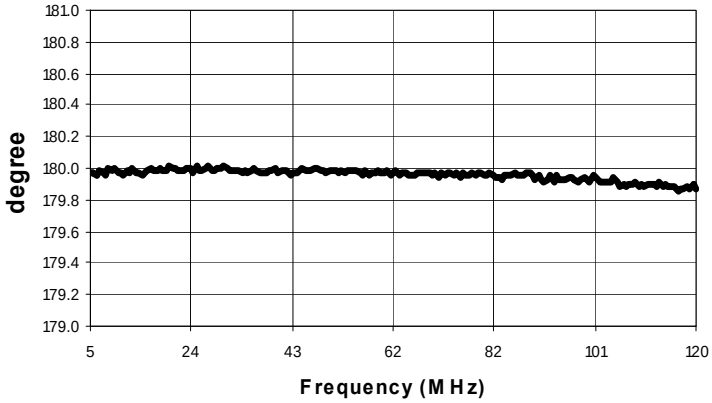
Insertion Loss 2 (Pin 5 - Pin 3)



Amplitude Balance



Phase Balance



Return Loss: Input (Pin 5)