

# MABA-008482-CF1A40

1.78:1 step up flux coupled transformer  
5 - 200MHz

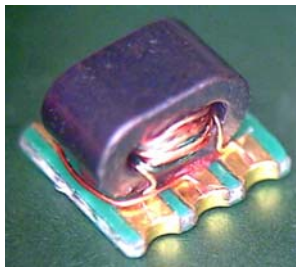
M/A-COM Products  
Part Status: Released Rev V2

## Features

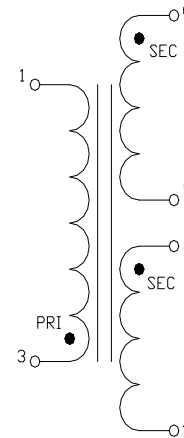
- Surface mount
- 1.78:1 step-up flux coupled transformer
- Separate secondary coils, allowing separate bias feed into balanced amplifiers
- 260°C reflow compatible
- RoHS\* compliant
- Part is welded and lead free
- Available on tape and reel. Reel quantity 2000

## Description

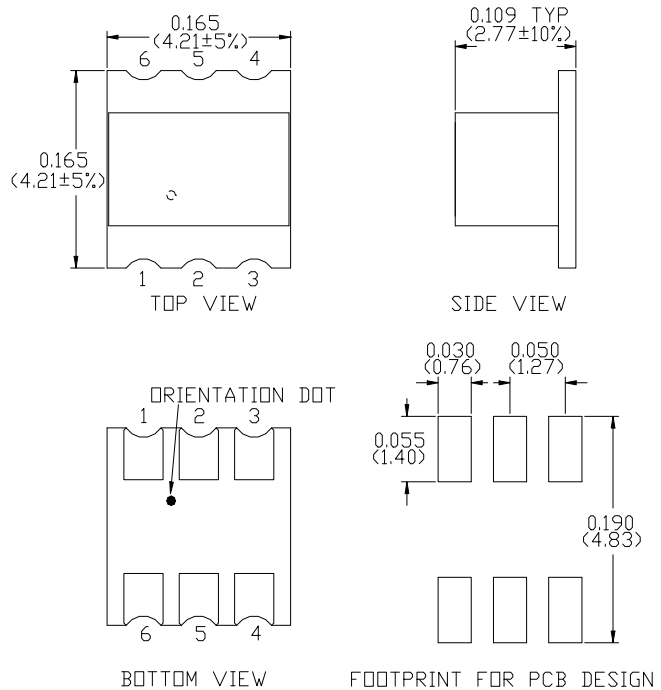
M/A-COM's MABA-008482-CF1A40 is a 1.78:1 Flux Coupled step up transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications. Suitable for use in 50 Ohm and 75 Ohm systems



## Schematic



## Case Style: SM-156



## Pin Configuration

Pin No.	Function
1	Primary (ground)
2	Secondary ground 2
3	Primary Dot (input)
4	Secondary (output 2)
5	Secondary ground 1
6	Secondary Dot (output 1)

## Ordering Information

Part Number	Package
MABA-008482-CF1A40	2000
MABA-008482-CF1ATB	Customer Test Board

Note: Reference Application Note **M513** for reel size information.

\* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

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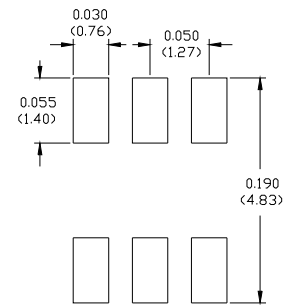
## Electrical Specifications: $T_A = 25^\circ\text{C}$ , $Z_0 = 75\Omega$ <sup>1</sup>

Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss	5 - 80 MHz	dB	-	0.35	0.5
	80-200 MHz	dB	-	0.48	1.0
Amplitude Balance	5 - 100 MHz	dB	-	0.02	$\pm 0.2$
	100 - 200 MHz	dB	-	0.14	$\pm 0.5$
Phase Balance	5 - 50 MHz	$^\circ$	-	0.50	$\pm 3$
	50 - 100 MHz	$^\circ$	-	1.95	$\pm 5$
	100 - 200 MHz	$^\circ$	-	4.15	$\pm 10$
Input Return Loss	5 - 100 MHz	dB	22	25.9	-
	100 - 200 MHz	dB	16	18.4	-

## Absolute Maximum Ratings<sup>1,2</sup>

Parameter	Absolute Maximum
Max RF Power	1W
Max DC current	250mA per arm
Operating Temperature	-40°C to +60°C
Storage Temperature	-40°C to +85°C

## Recommended PCB Configuration



FOOTPRINT FOR PCB DESIGN

- Exceeding any one or combination of these limits may cause permanent damage to this device.
- M/A-COM does not recommend sustained operation near these survivability limits.

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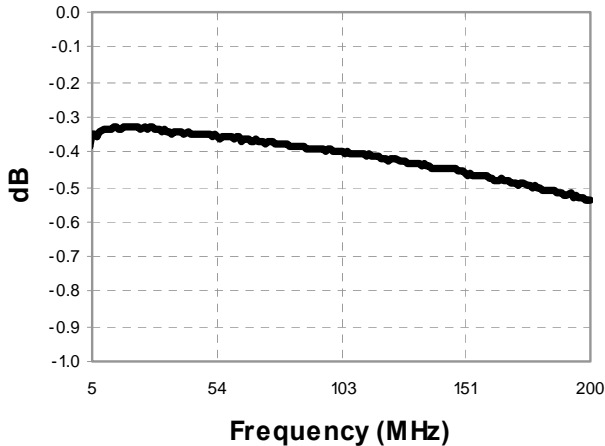
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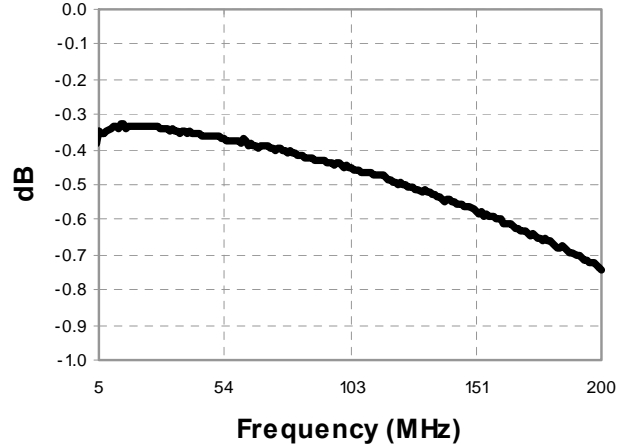
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Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$  <sup>1</sup>

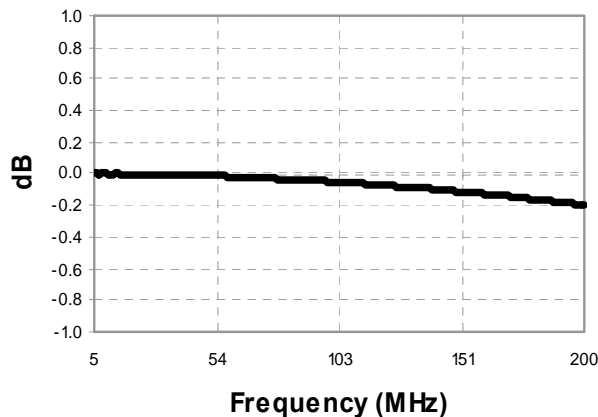
Insertion Loss 1 (pin3 - pin6)



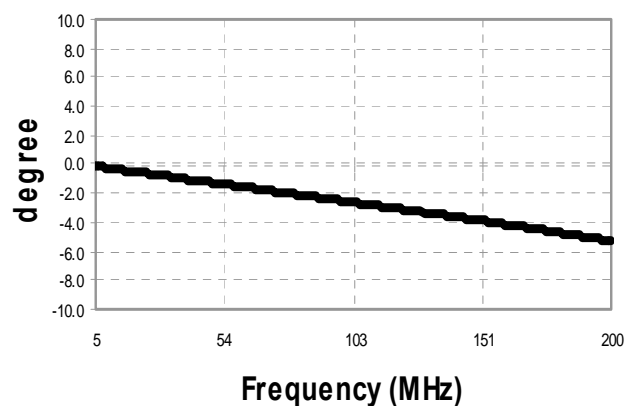
Insertion Loss 2 (pin3 - pin4)



Amplitude Balance



Phase Balance



Return Loss: Input

