

## Features

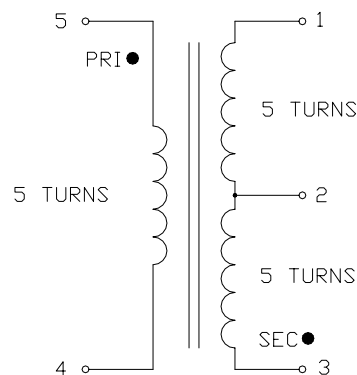
- Surface Mount
- 4:1 Impedance
- 260°C Reflow Compatible
- RoHS\* Compliant, lead free
- Available on Tape and Reel.

## Description

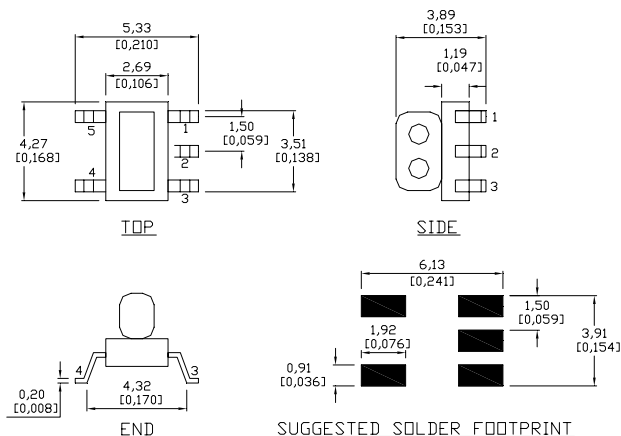
M/A-COM's MABA-009836-CF48A0 is a 4:1 RF flux coupled step up transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



## Schematic



## Case Style SM-138



## Pin Configuration

Pin No.	Function
1	Secondary
2	Secondary CT
3	Secondary Dot
4	Primary
5	Primary Dot

Dimensions are inches (millimeters)  $\pm 0.015$  (0.38) unless otherwise specified.

## Ordering Information

Part Number	Package
MABA-009836-CF48A0	2000 piece reel
MABA-009836-CF48TB	Customer Test Board

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

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

**ADVANCED:** Data Sheets contain information regarding a product M/A-COM is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

**PRELIMINARY:** Data Sheets contain information regarding a product M/A-COM has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

- **North America** Tel: 800.366.2266 / Fax: 978.366.2266
- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Visit [www.macom.com](http://www.macom.com) for additional data sheets and product information.

M/A-COM Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

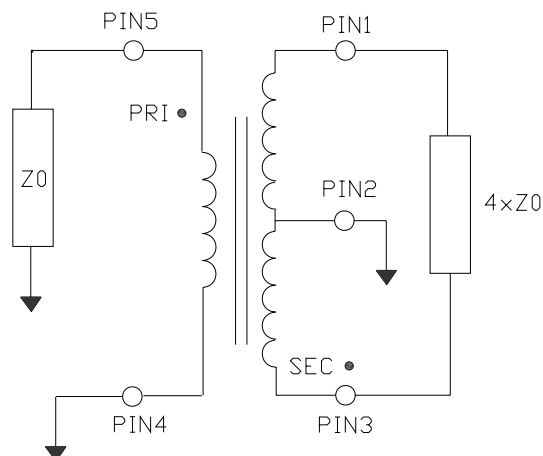
## Electrical Specifications: $T_A = 25^\circ\text{C}$ , 0dBm, $Z_0 = 50\Omega$

Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss	5 - 65 MHz	dB	-	0.4	0.7
	65 - 200 MHz	dB	-	0.9	1.5
Amplitude Unbalance	5 - 65 MHz	dB	-	$\pm 0.02$	$\pm 0.1$
	65 - 200 MHz	dB	-	$\pm 0.2$	$\pm 0.5$
Phase Unbalance	5 - 65 MHz	$^\circ$	-	$\pm 0.4$	$\pm 2.0$
	65 - 200 MHz	$^\circ$	-	$\pm 2.0$	$\pm 8.0$
Input Return Loss	5 - 65 MHz	dB	15	22	-
	65 - 200 MHz	dB	7	11	-

## Recommended Maximum Ratings

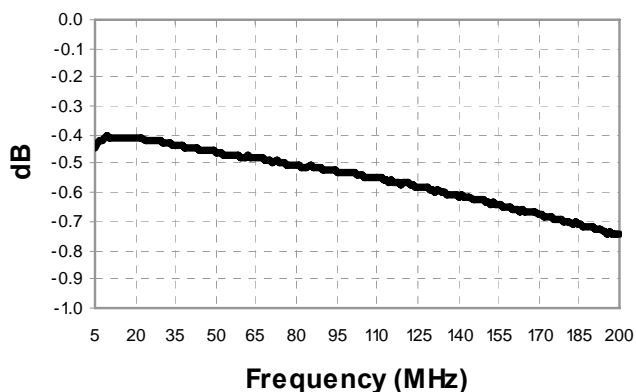
Parameter	Value
RF Power	50mW
Peak IF Current	200mA
Operating Temperature	$-40^\circ\text{C}$ to $+85^\circ\text{C}$
Storage Temperature	$-40^\circ\text{C}$ to $+85^\circ\text{C}$

## Application Circuit

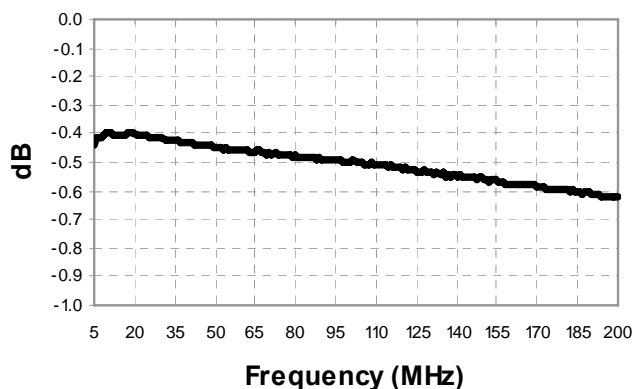


Typical Performance Curves:  $T_A = 25^\circ\text{C}$ , 0dBm,  $Z_0 = 50\Omega$

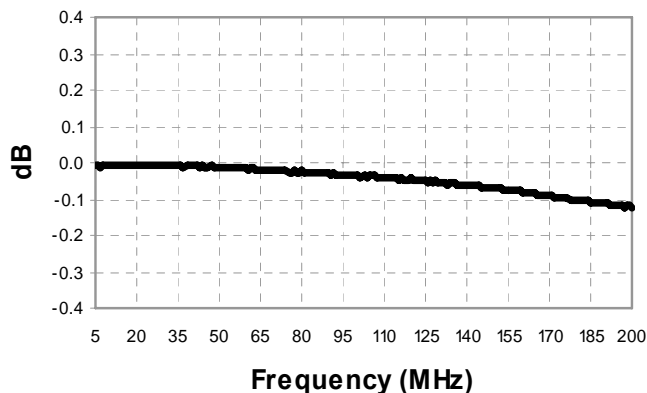
## Insertion Loss1:



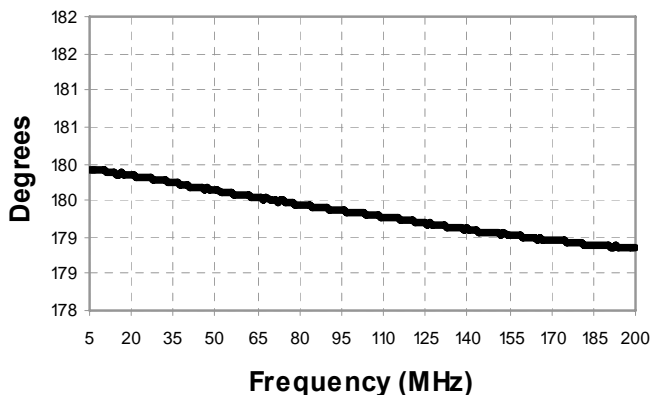
## Insertion Loss 2:



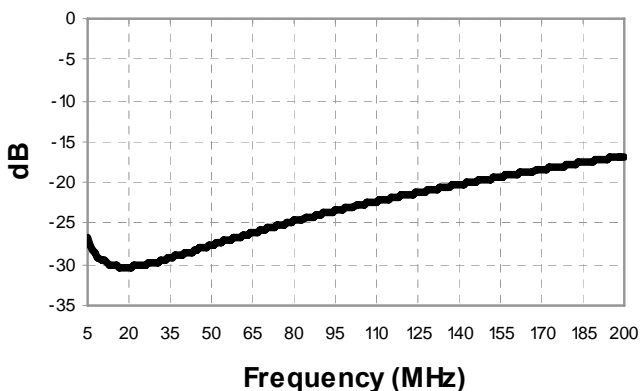
## Amplitude Balance



## Phase Balance



## Return Loss: Input



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

MACOM:

[MABA-009836-CF48A0](#)