

# MABA-009807-CF4010

4:1 RF Transformer  
0.05 - 3.072 MHz

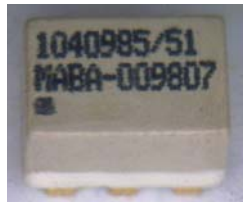
M/A-COM Products  
Rev. V1

## Features

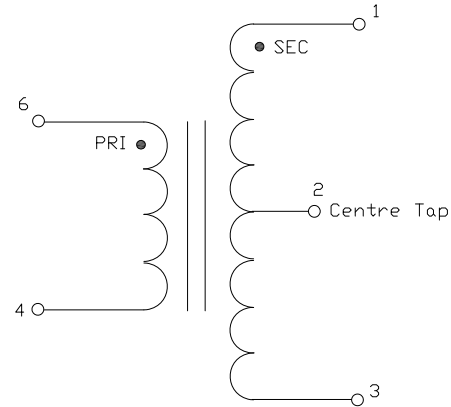
- Surface Mount
- 4:1 Impedance
- CT on Secondary
- 50 Ohm
- RoHS compliant, lead free
- RoHS version of ETM4-1T-2

## Description

M/A-COM's MABA-009807-CF4010 is a 4:1 RF Transformer in a low cost surface mount package. Ideally suited for high volume CATV application.



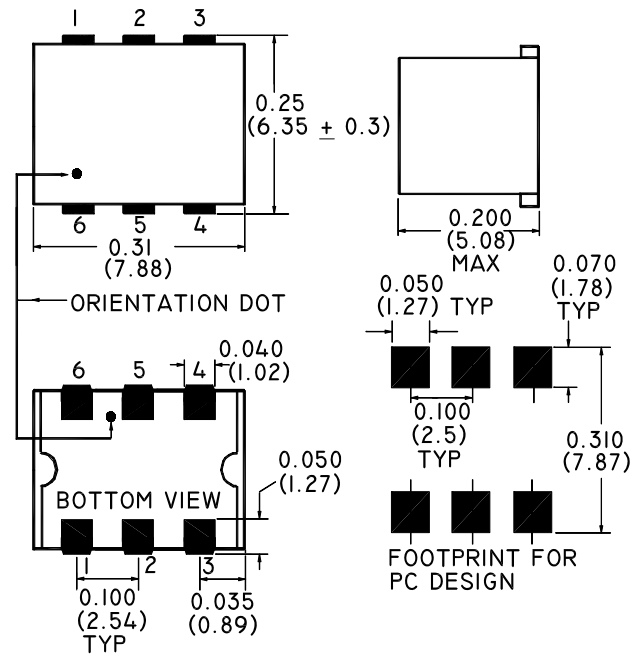
## Schematic



## Pin Configuration

Function	Pin Number
Secondary Dot	1
Secondary Centre Tap	2
Secondary	3
Primary	4
Not Connected	5
Primary Dot	6

## Case Style SM-1



## Ordering Information

Part Number	Package
MABA-009807-CF4010	900 pieces per reel

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 Technology Solutions 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 Technology Solutions 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.

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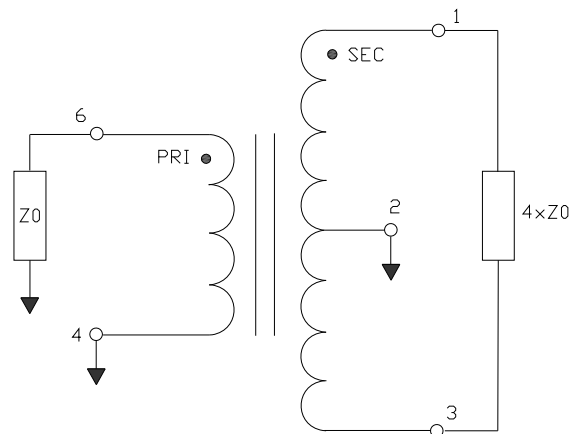
**Electrical Specifications:  $T_A = 25^\circ\text{C}$ , 0dBm,  $Z_0 = 50\Omega$**

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range	.05 – 3.072 MHz				
Insertion Loss	.05 – 3.072 MHz	dB	–	–	1
Amplitude Balance	.05 – 3.072 MHz	dB	–	–	$\pm 0.1$
Phase Balance	.05 – 3.072 MHz	$^\circ$	–	–	$\pm 1$
Input Return Loss	.05 – .20 MHz	dB	18	–	–
	.20 - 3.072 MHz	dB	25	–	–

## Recommended Maximum Ratings

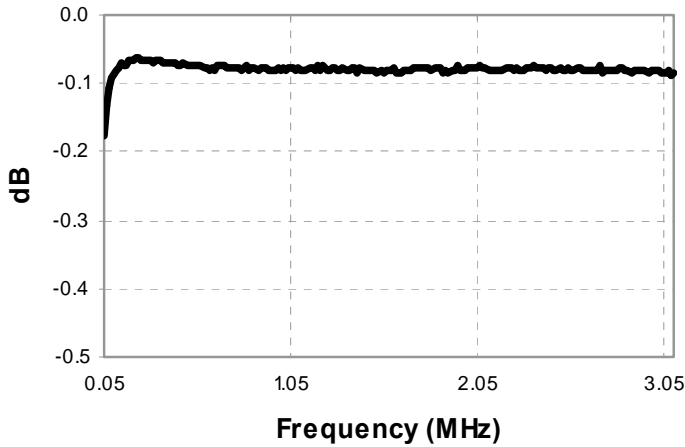
Parameter	Value
RF Power	250mW
DC Current	30mA
Operating Temperature	$-20^\circ\text{C}$ to $+85^\circ\text{C}$
Storage Temperature	$-55^\circ\text{C}$ to $+100^\circ\text{C}$

## Application Circuit

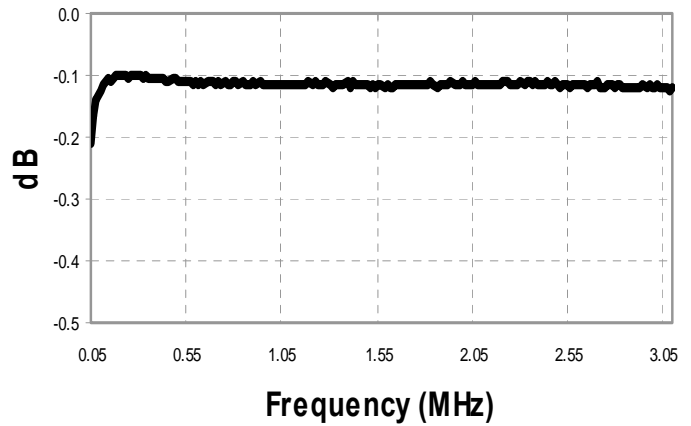


Typical Performance Curves:  $T_A = 25^\circ\text{C}$ , 0dBm,  $Z_0 = 50\Omega$

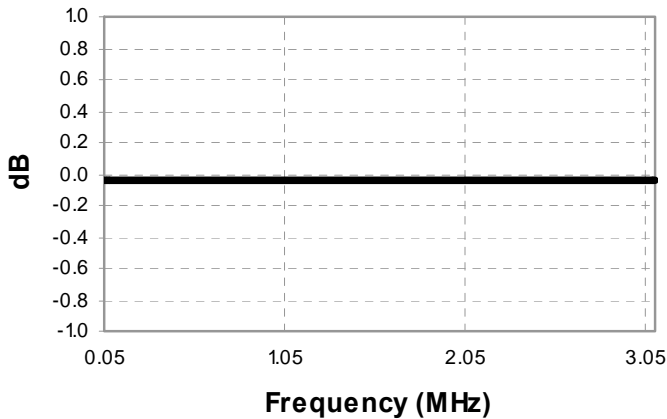
Insertion Loss: Pin4 - Pin1



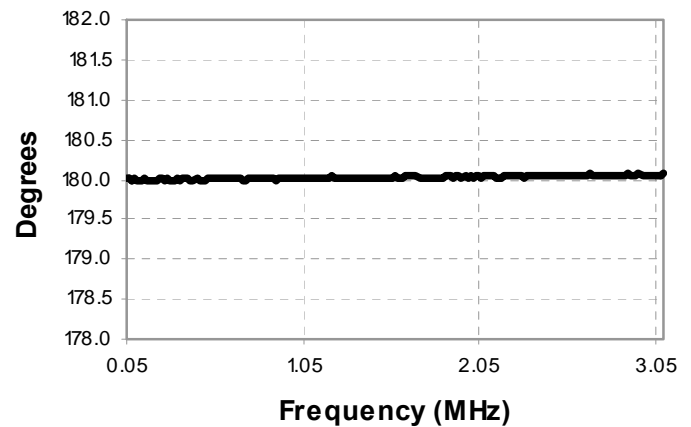
Insertion Loss: Pin4 - Pin3



Amplitude Balance



Phase Balance



Return Loss: Input

