# MABA-009807-CF4010



4:1 RF Transformer 0.05 - 3.072 MHz

M/A-COM Products Rev. V2

#### **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.



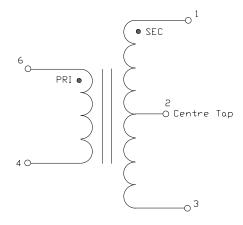
## **Pin Configuration**

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

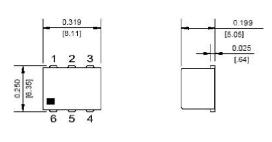
### **Ordering Information**

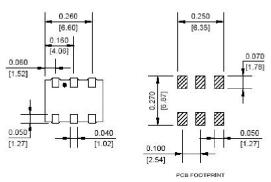
Package		
900 pieces per reel		

#### **Schematic**



## Case Style SM-1





Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

Note: Reference Application Note M513 for reel size information.

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

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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.

- 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.

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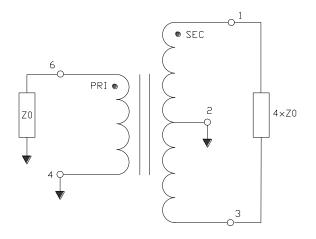
Electrical Specifications:  $T_A = 25$ °C, 0dBm,  $Z_0 = 50\Omega$ 

Parameter	Test Conditions	Units	Min.	Тур.	Max.
Frequency Range	.05 – 3.072 MHz				
Insertion Loss	.05 – 3.072 MHz	dB	_	_	1
Amplitude Balance	.05 – 3.072 MHz	dB	_	_	±0.1
Phase Balance	.05 – 3.072 MHz	0	_	_	±1
Input Return Loss	.05 – .20 MHz .20 - 3.072 MHz	dB dB	18 25	_	-

# **Recommended Maximum Ratings**

Parameter	Value		
RF Power	250mW		
DC Current	30mA		
Operating Temperature	-20°C to +85°C		
Storage Temperature	-55°C to +100°C		

# **Application Circuit**



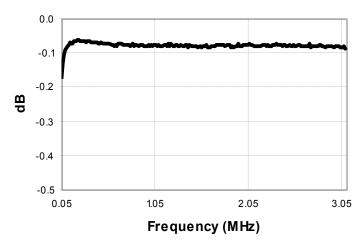
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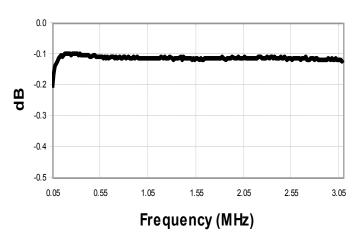
4:1 RF Transformer M/A-COM Products 0.05 - 3.072 MHz Rev. V2

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

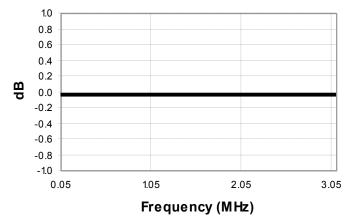
### Insertion Loss: Pin4 - Pin1



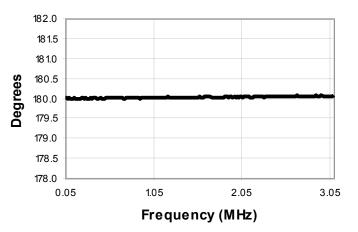
#### Insertion Loss: Pin4 - Pin3



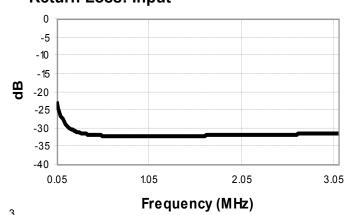
### **Amplitude Balance**



**Phase Balance** 



# **Return Loss: Input**



**Component Package orientation** 



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