

# MABA-009650-CF1160



1:1 Flux Coupled Transformer  
5 to 120 MHz

M/A-COM Products  
Released, Rev. V1

## Features

- Surface Mount
- 1:1 Flux Coupled
- 260°C Reflow Compatible
- Excellent temperature stability
- RoHS version of ETC1-1T-8, lead free

## Description

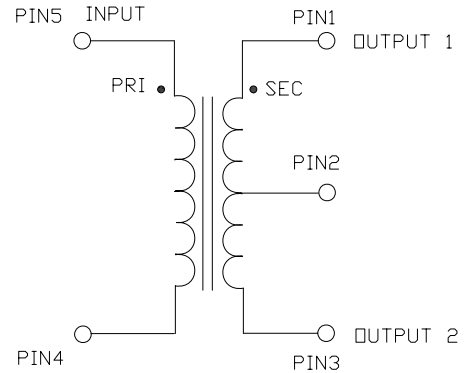
M/A-COM's MABA-009650-CF1160 is a low cost 1:1 Flux Coupled Transformer designed for high volume CATV Broadband applications. Suitable for use in 50 Ohm and 75 Ohm systems



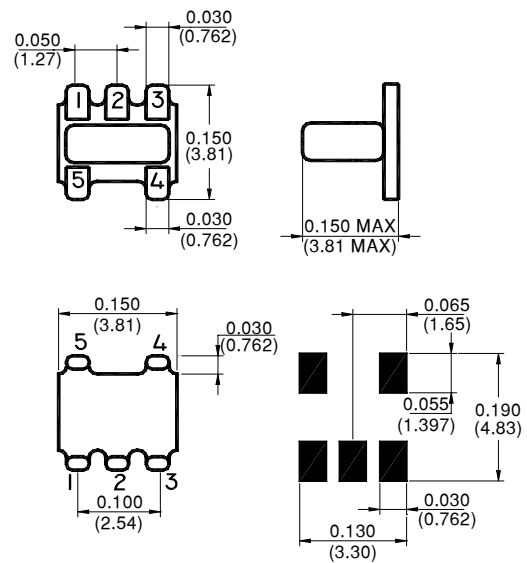
## Pin configuration

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

## Schematic



## Case style: SM-22



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

## Ordering information

Part number	Description
MABA-009650-CF1160	Reel quantity 2000
MABA-009650-CF11TB	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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**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.

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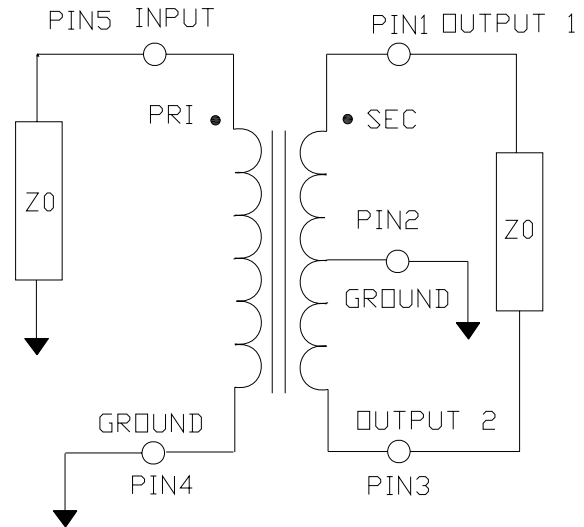
## Electrical Specifications: $T_A=25^\circ\text{C}$ , $Z_0=75\Omega$

Parameter	Frequency	Units	Min	Typ	Max
Frequency Range:	5 - 120 MHz				
Insertion Loss	5 - 120 MHz	dB	-	0.4	0.6
Amplitude Balance	5 - 120 MHz	dB	-	$\pm 0.1$	$\pm 0.3$
Phase Balance	5 - 120 MHz	$^\circ$	-	$\pm 0.5$	$\pm 2.0$
Input Return Loss	5 - 65 MHz	dB	22	28	-
	65 - 120 MHz	dB	17	23	-

## Recommended Maximum Ratings

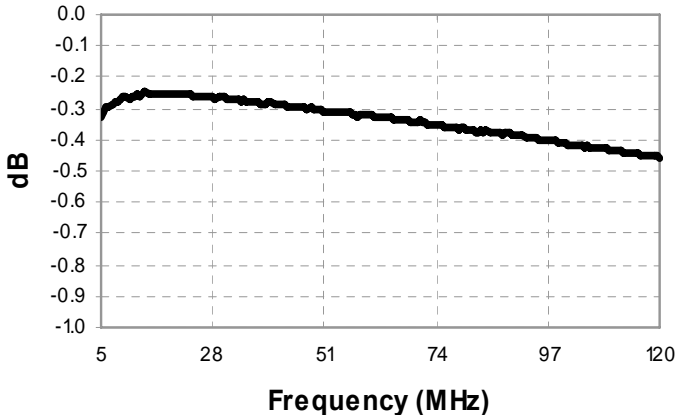
Parameter	Value
RF Power	250 mW
DC current	30mA
Operating Temperature	$-40^\circ\text{C}$ to $+85^\circ\text{C}$
Storage Temperature	$-40^\circ\text{C}$ to $+85^\circ\text{C}$

## Application Circuit

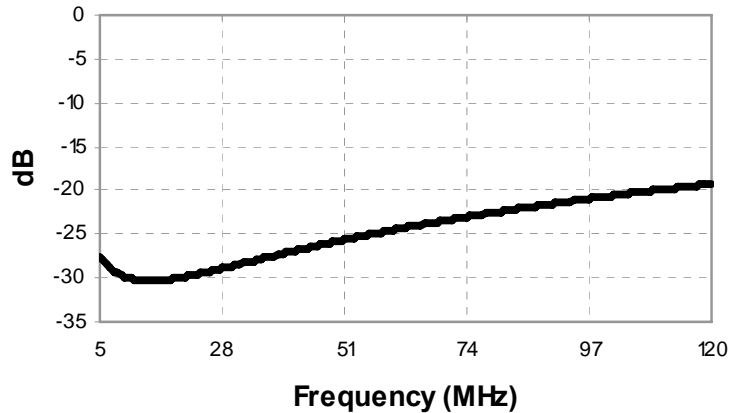


Typical Performance Curves:  $T_A=25^\circ\text{C}$ ,  $Z_0=75\Omega$ ,  $P_{in}=0\text{dBm}$

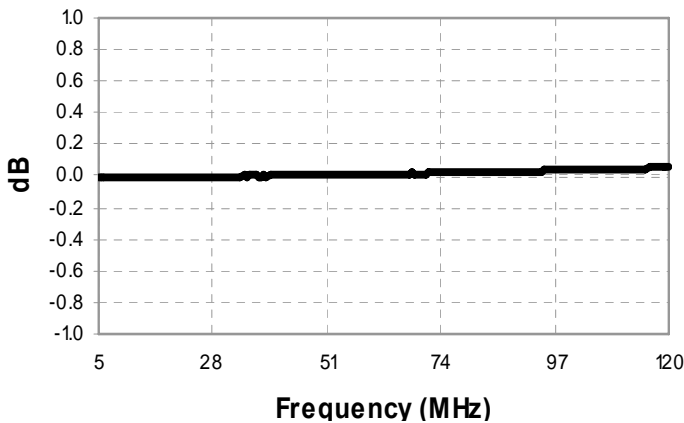
Insertion Loss



Return Loss: Input



Amplitude Balance



Phase Balance

