

Features

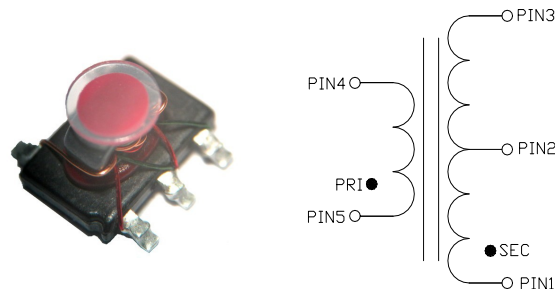
- 1:4 Impedance Ratio
- Surface Mount Package
- Centre tap on Secondary
- 260°C Reflow Compatible
- RoHS* Compliant and Lead Free
- Available on Tape & Reel

Description

The MABA-010061-CF4FA0 is a 1:4 RF flux coupled transformer in a surface mount package.

Ideally suited for broadband CATV applications.

Schematic



Pin Configuration

Pin #	Function
1	Secondary dot
2	Secondary Centre Tap
3	Secondary
4	Primary
5	Primary Dot

Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75 \Omega$, $P_{IN} = 0 \text{ dBm}$

Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss	5 - 100 MHz	dB	—	1.22	1.5
Amplitude Unbalance (Nominal 0 dB)	5 - 100 MHz	dB	—	0.01	± 0.1
Phase Unbalance (Nominal 180°)	5 - 100 MHz	°	—	0.05	± 1.0
Input Return Loss	5 - 65 MHz 65 - 200 MHz	dB	15 16	19 18	—

Ordering Information

Part #	Description
MABA-010061-CF4FA0	900 piece reel
MABA-010061-CF4FTB	customer test board

Recommended Maximum Ratings

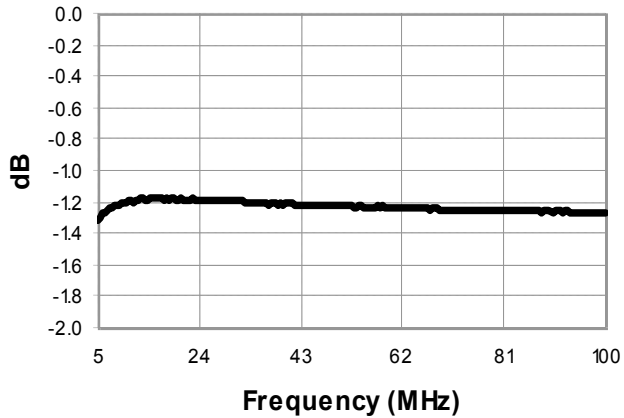
Parameter	Value
Input power	$>+28 \text{ dBm}$ (631 mW)
DC current, (tested @ 5 V)	$>600 \text{ mA}$
Operating Temperature	-40°C to $+85^\circ\text{C}$
Storage Temperature	-55°C to $+100^\circ\text{C}$

1:4 Flux Coupled Transformer 5 - 100 MHz

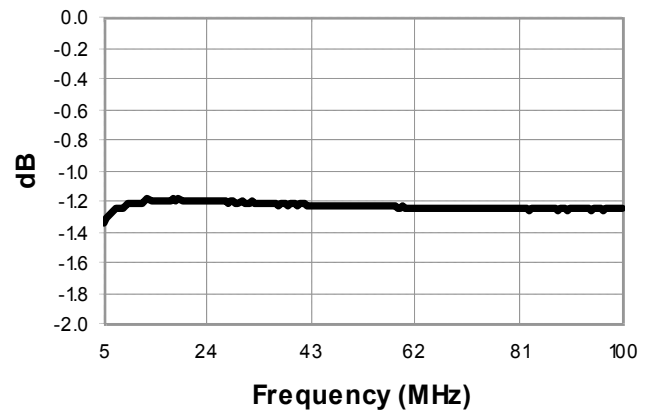
Rev. V2

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

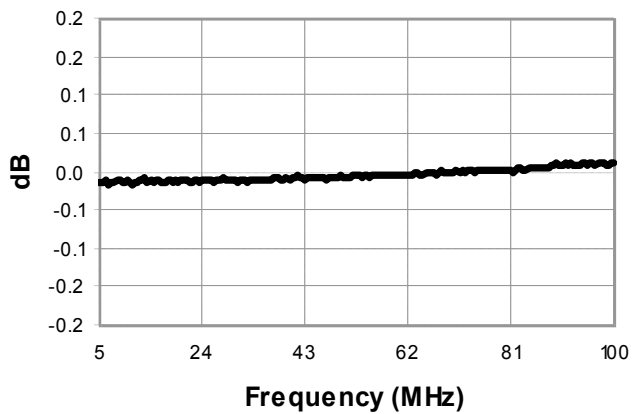
Insertion Loss 1: (Pin 5 to 1)



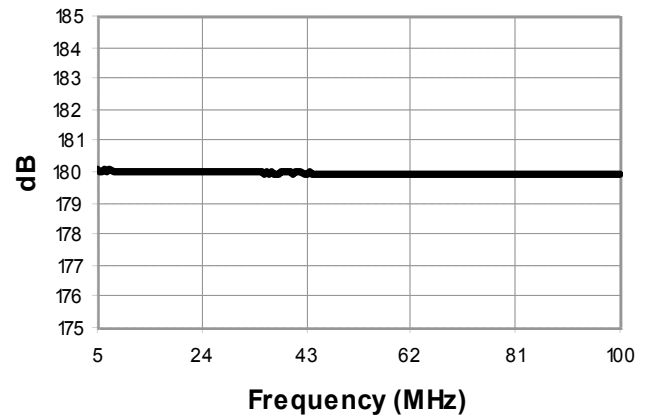
Insertion Loss 2: (Pin 5 to 3)



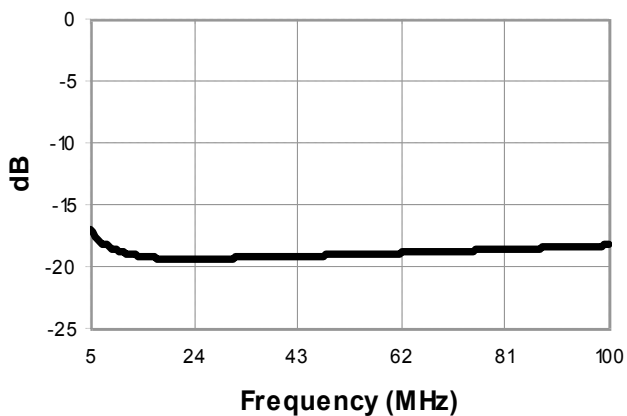
Amplitude Balance



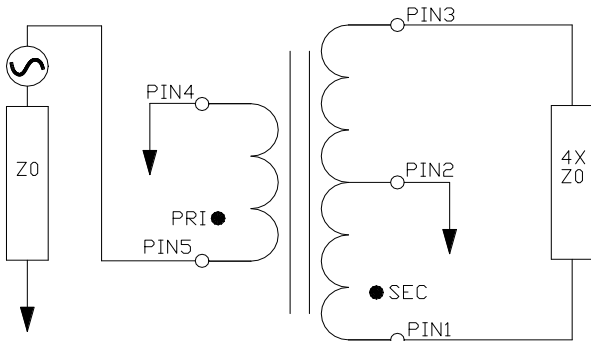
Phase Balance



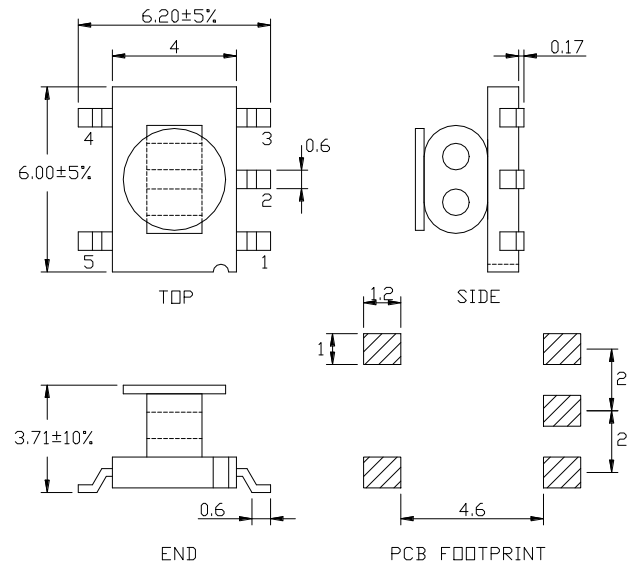
Return Loss: Input (Pin 5)



Application Circuit

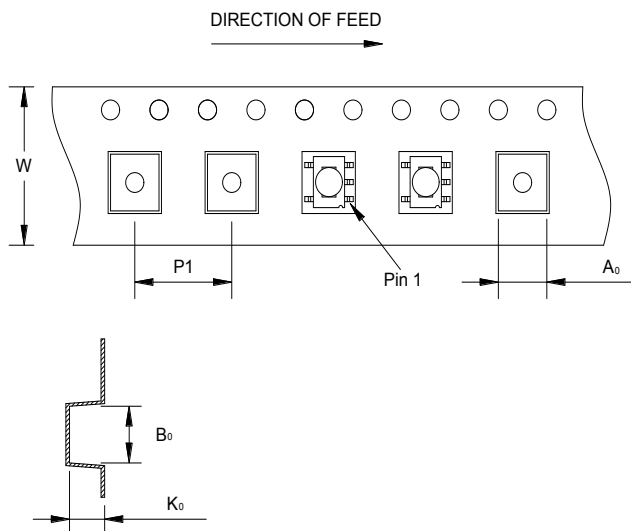


Outline Drawing



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

Reel Orientation



Tape & Reel Information

Item	Dimension
Ao	6.6 mm, +/-0.1 mm
Bo	6.2 mm, +/-0.1 mm
Ko	4.2 mm, +/-0.1 mm
W	16.0 mm, +/-0.3 mm
P1	8.0 mm, +/-0.1 mm