# MABA-011010



Transformer, 1:1.33 5 - 1200 MHz

Rev. V3

#### **Features**

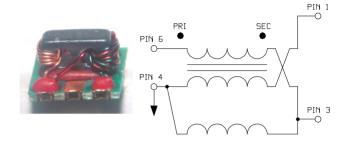
- 1:1.33 Impedance Ratio
- Surface Mount Package
- Excellent Temperature Stability
- RoHS Compliant and Pb Free
- 260°C Reflow Compatible
- · Available on Tape and Reel
- Suitable for all CATV, Broadband and FTTx Applications

### **Description**

The MABA-011010 is a 1:1.33 transformer with tertiary winding in a surface mount package.

Ideally suited for CATV Broadband applications.

### **Functional Schematic**



#### **Pin Configuration**

Pin #	Function
1	Secondary Dot
2	Not Used
3	Secondary
4	Primary
6	Primary Dot

# Electrical Specifications: Freq. = 5 - 1200 MHz, $T_A$ = +25°C, $Z_0$ = 75 $\Omega$ , $P_{IN}$ = 0 dBm

Parameter	Frequency Test Conditions (MHz)	Units	Min.	Тур.	Max.
Impedance Ratio	_	ratio	_	1:1.33	_
Insertion Loss (pin 6 - pin 1)	5 - 500 500 - 1000 1000 - 1200	dB	_	0.95 0.95 0.98	1.1 1.2 1.3
Insertion Loss (pin 6 - pin 3)	5 - 500 500 - 1000 1000 - 1200	dB	_	0.90 1.00 1.30	1.10 1.40 1.65
Amplitude Balance	5 - 500 500 - 1200	dB	_	0.06 0.1	0.3 0.9
Phase Balance	5 - 500 500 - 1200		_	3.0 5.0	6 8
Input Return Loss (pin 6)	5 - 500 500 - 1000 1000 - 1200	dB	20.0 17.0 15.5	25 21 19	_

## **Ordering Information**

Part Number	Package
MABA-011010	2000 piece reel
MABA-011010-TB	Customer Test Board

## **Recommended Maximum Ratings**

Parameter	Units
Input RF Power	250 mW
DC Current	200 mA
Operating Temperature	-40°C - +85°C

1

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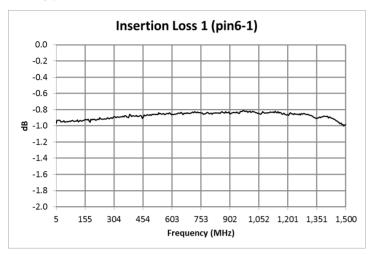
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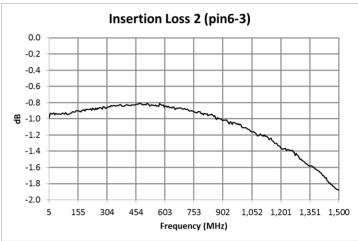


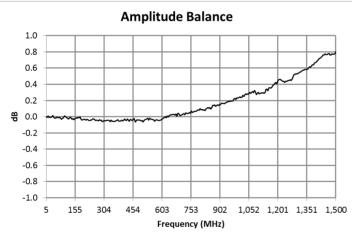
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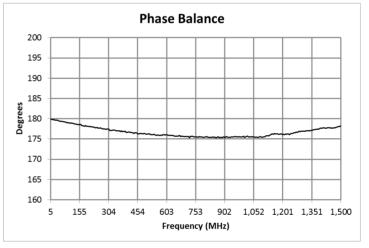
Rev. V3

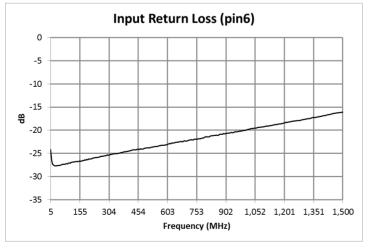
### **Typical Performance Curves**











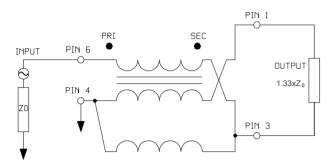
Full temperature plots available on request



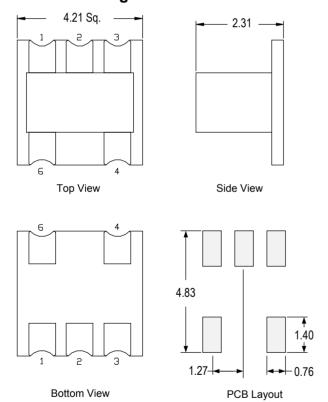
Transformer, 1:1.33 5 - 1200 MHz

Rev. V3

## **Application Circuit**



# **Outline Drawing**



## **Tape & Reel Information**

Parameter	Units	Value		
Qty per reel	-	2000		
Reel size	mm	330		
Tape width (W)	mm	12.00		
Pitch (P1)	mm	8.00		
A <sub>0</sub>	mm	4.5		
B <sub>0</sub>	mm	4.5		
K <sub>0</sub>	mm	2.73		
Orientation	-	F31		
Reference Application note ANI-019 for orientation				

- 1. Dimensions in mm.
- 2. Tolerance: ±0.2 mm unless otherwise noted.
- 3. Model number and lot code are printed on the reel.
- 4. Plating finish: CuSn6

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4