#### Transformer, 1:1.33 5 - 1200 MHz

#### Features

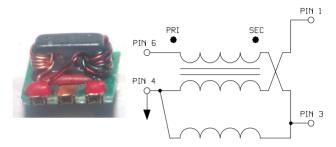
- 1:1.33 Impedance Ratio
- Surface Mount Package
- Excellent Temperature Stability
- RoHS Compliant and Pb Free
- 260°C Reflow Compatible
- Available on Tape and Reel
- Suitable for all CATV, Broadband and FTTx Applications

#### 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)		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			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	0	_	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

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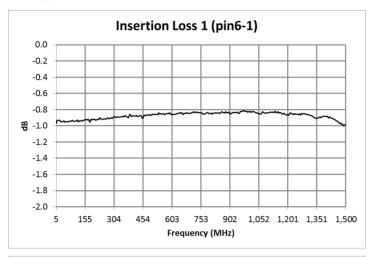
Rev. V3

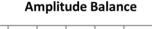
#### Transformer, 1:1.33 5 - 1200 MHz

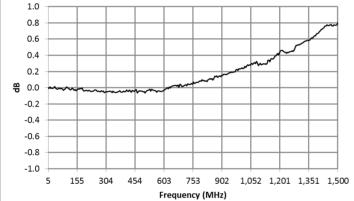
Rev. V3

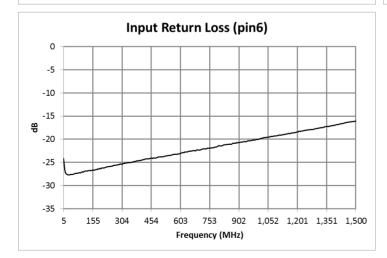
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#### **Typical Performance Curves**



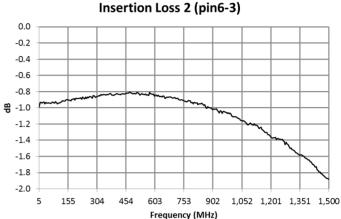


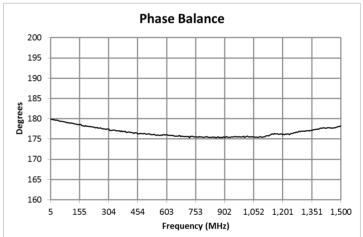




Full temperature plots available on request

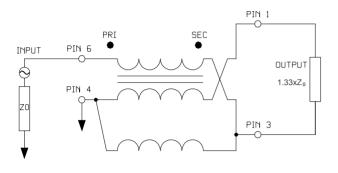
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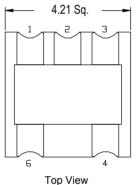


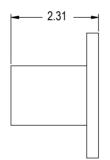
### Transformer, 1:1.33 5 - 1200 MHz

#### **Application Circuit**

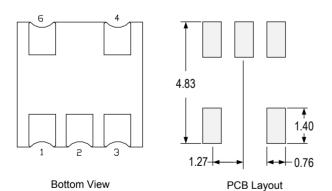


#### **Outline Drawing**





Side View



- 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



Rool sizo

Parameter

Qty per reel

**Tape & Reel Information** 

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			

Units

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Value

2000

Rev. V3

Transformer, 1:1.33 5 - 1200 MHz



Rev. V3

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