

## Features

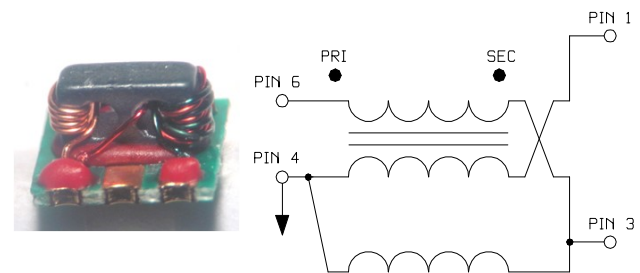
- 1:1.33 Impedance Ratio
- Surface Mount Package
- Excellent Temperature Stability
- RoHS Compliant and Pb Free
- 260°C Reflow Compatible
- Available on Tape and Reel
- Suitable for all CATV, Broadband and FTTx Applications

## 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<sub>A</sub> = +25°C, Z<sub>0</sub> = 75 Ω, P<sub>IN</sub> = 0 dBm

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

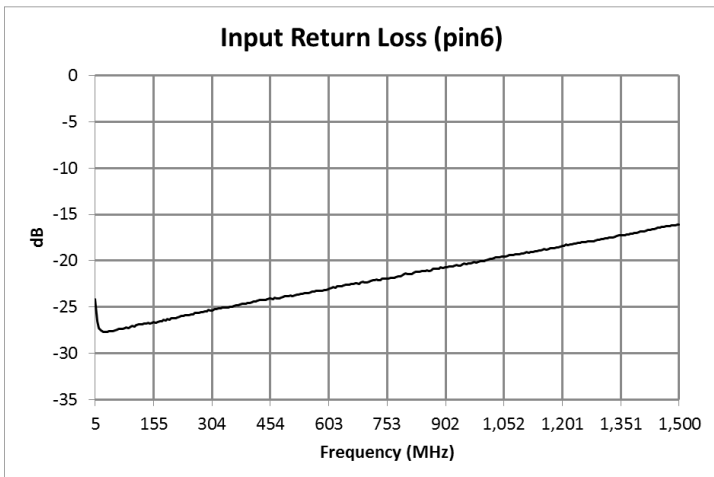
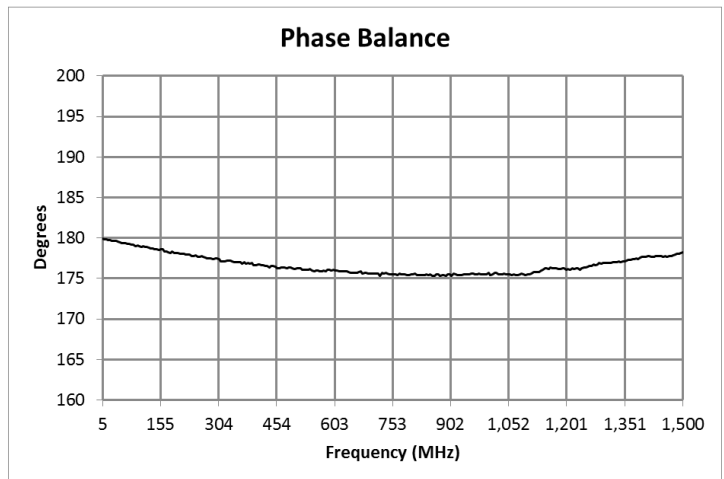
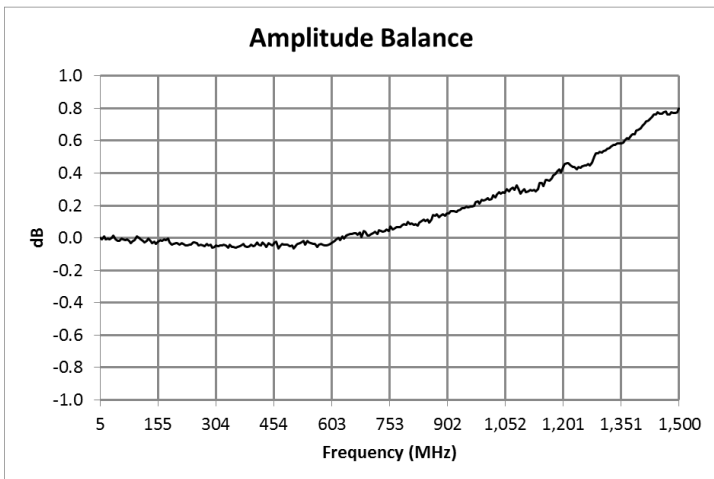
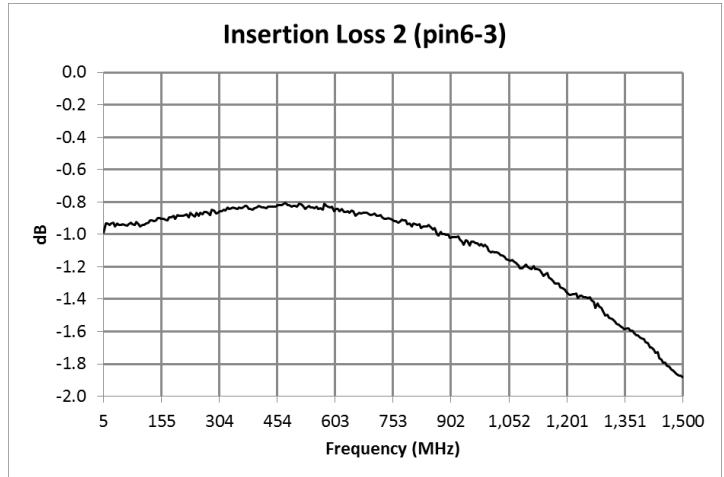
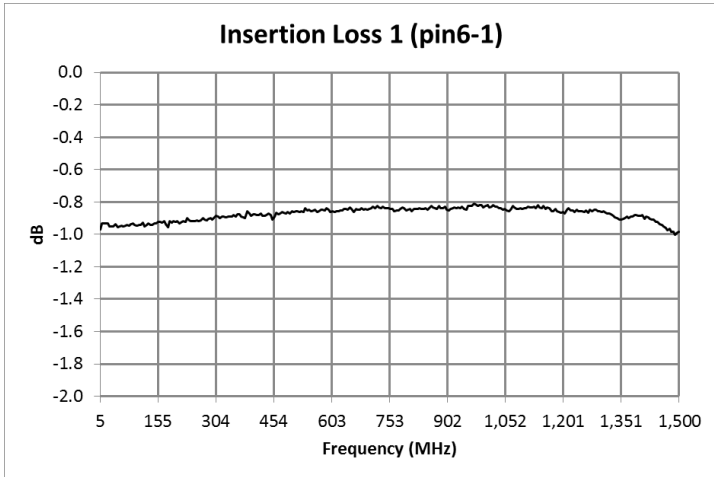
## Ordering Information

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

## Typical Performance Curves

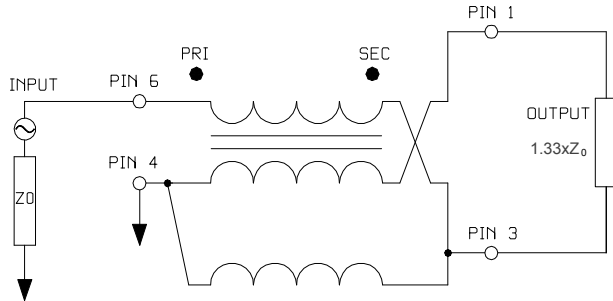


2 Full temperature plots available on request

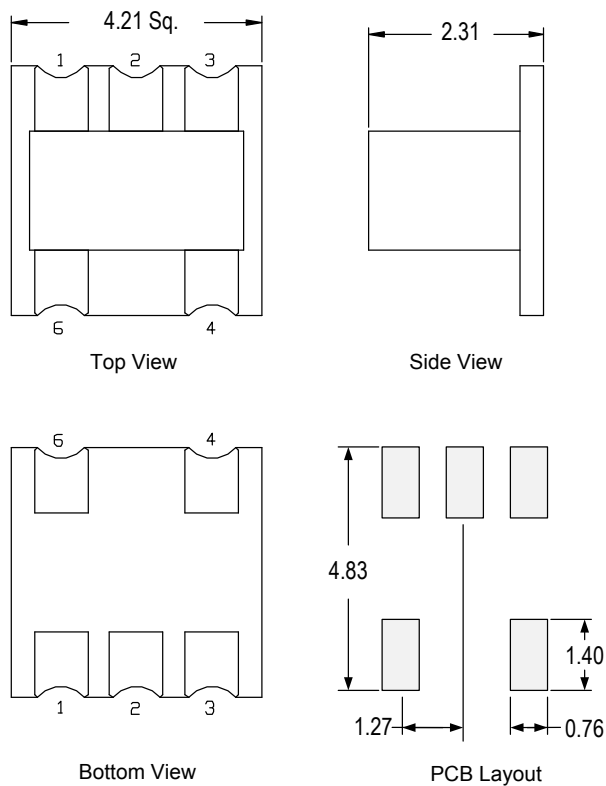
MACOM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit [www.macom.com](http://www.macom.com) for additional data sheets and product information.

For further information and support please visit:  
<https://www.macom.com/support>

## 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
$A_0$	mm	4.5
$B_0$	mm	4.5
$K_0$	mm	2.73
Orientation	-	F31
Reference Application note ANI-019 for orientation		

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

MACOM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with MACOM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.