



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

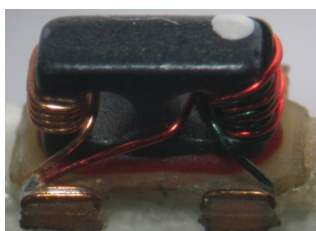


Transformer, 1:1 Transmission Line with tertiary winding 45 - 1200 MHz

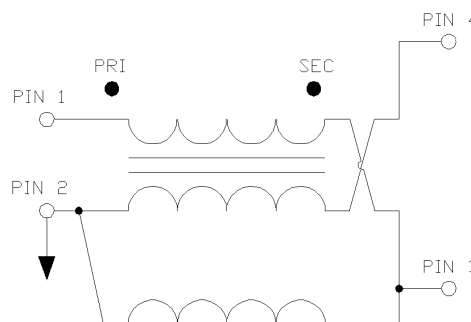
Rev. V3

Features

- 1:1 Impedance Ratio
- Surface Mount
- Available on tape and reel
- 260°C Reflow compatible
- RoHS Compliant and Pb free
- Excellent Temperature Stability
- Can be used on 50 Ω and 75 Ω systems
- Suitable for all CATV, Broadband and FTTx applications.



Schematic



Ordering Information

Part Number	Description
MABA-011013	Tape & Reel
MABA-011013-TB	Evaluation Board

Pin Configuration

Pin No.	Function
1	Primary Dot
2	Primary
3	Secondary
4	Secondary Dot

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

Parameter	Conditions	Units	Min.	Typ.	Max.
Frequency Range	—	MHz	45	—	1200
Impedance	—	Ω	—	75	—
Impedance Ratio	—	Ratio	—	1:1	—
Insertion Loss (Pin1 - Pin4)	45 - 100 MHz	dB	—	0.8	1.4
	100 - 600 MHz			0.8	1.1
	600 - 1200 MHz			0.9	1.3
Insertion Loss (Pin1 - Pin3)	45 - 100 MHz	dB	—	0.8	1.4
	100 - 600 MHz			0.7	1.1
	600 - 1200 MHz			0.9	1.5
Amplitude Balance	45 - 600 MHz	dB	—	0.2	± 0.5
	600 - 1200 MHz			0.3	± 1.1
Phase Balance	45 - 600 MHz	°	—	2	± 6
	600 - 1200 MHz			3	± 10
Input Return Loss (Pin1)	45 - 600 MHz	dB	20	24	—
	600 - 1200 MHz		15	25	

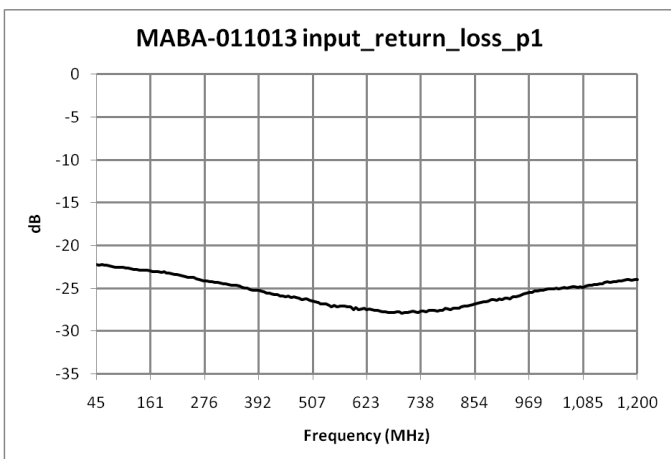
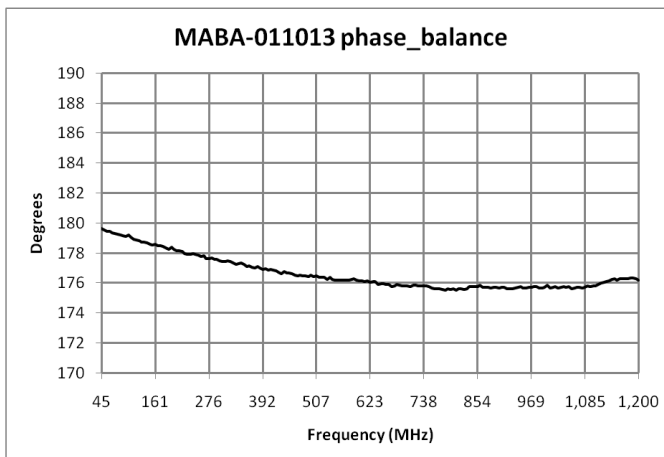
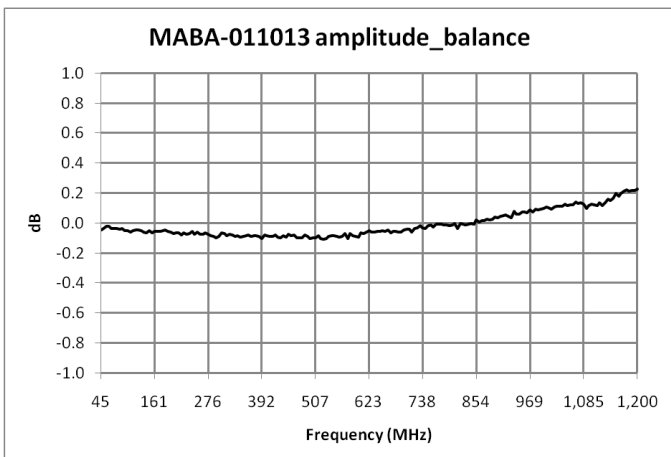
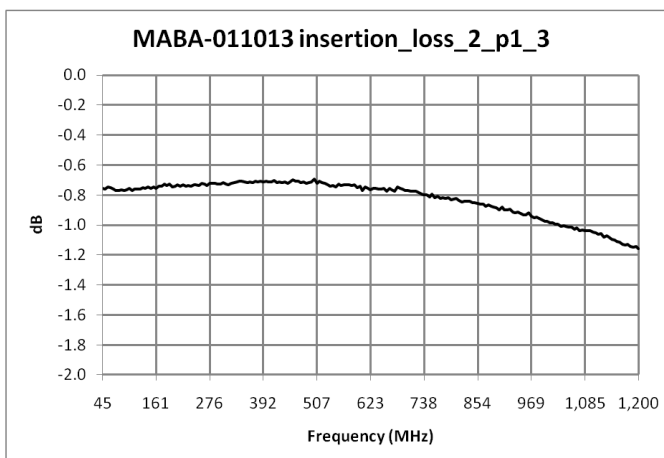
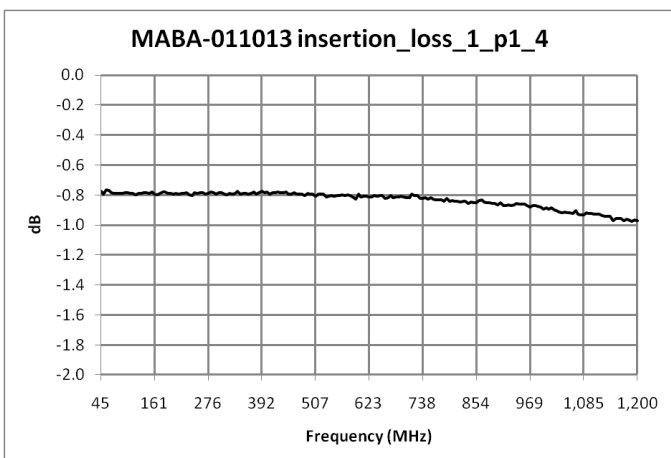
1

M/A-COM 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 for additional data sheets and product information.

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

Transformer, 1:1 Transmission Line with tertiary winding 45 - 1200 MHz

Rev. V3



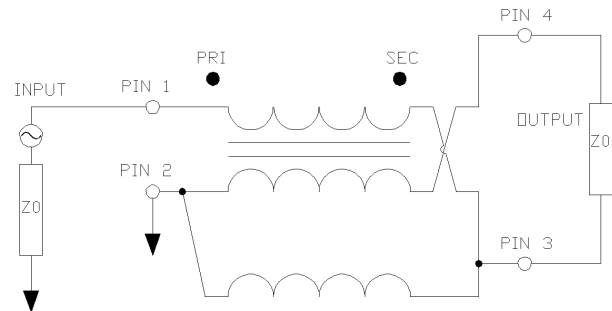
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

Recommended Maximum Ratings

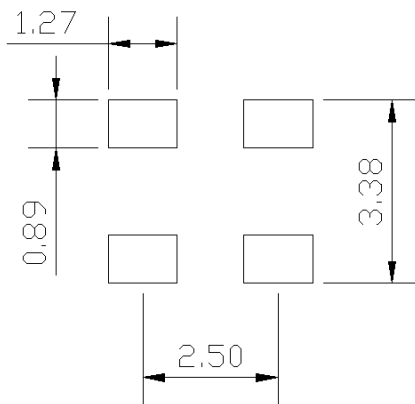
Parameter	Units
Input Power	2 W
DC Current	200 mA
Operating Temperature	-40°C to +100°C

Temperature data available on request

Application Circuit



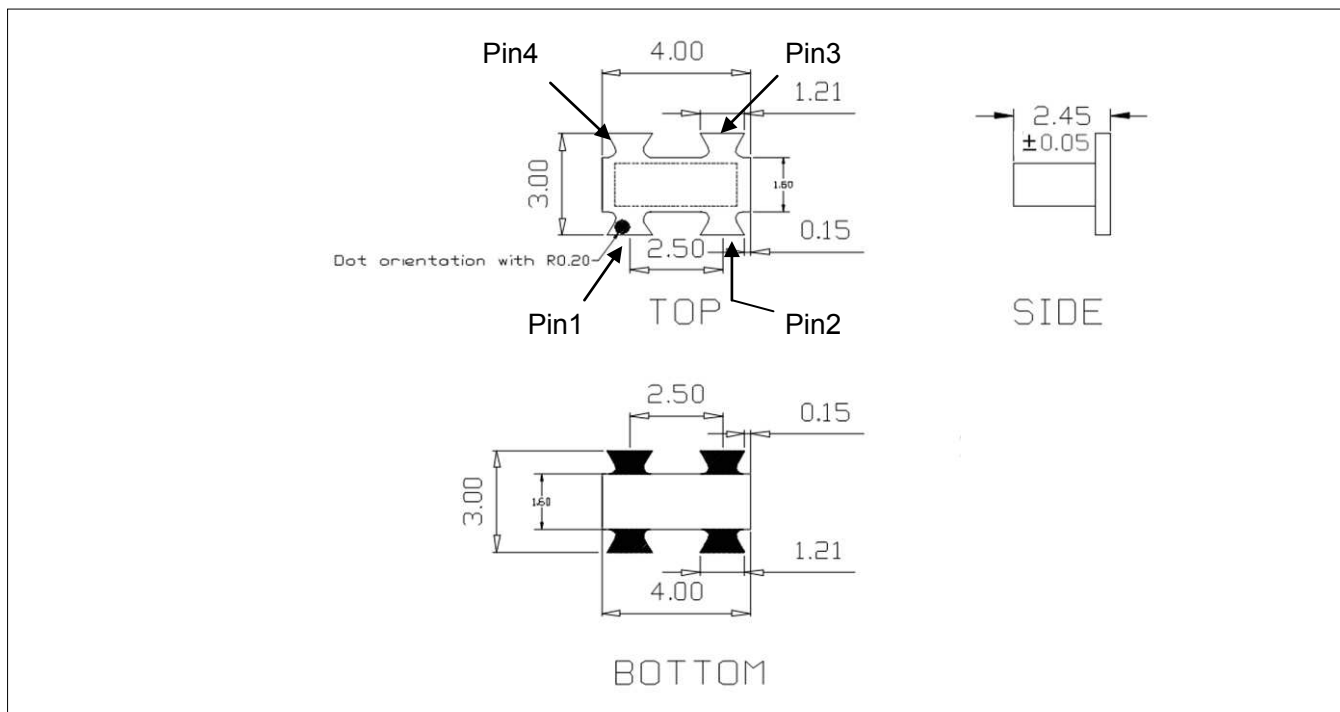
Recommended Footprint



Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width (W)	mm	12.00
Pitch (P ₁)	mm	8.00
A ₀	mm	3.3
B ₀	mm	4.3
K ₀	mm	2.6
Orientation	-	F51
Reference Application note ANI-019 for orientation		

Outline Drawing



1. Dimensions in mm.
2. Tolerance: ± 0.2 mm unless otherwise noted.
3. Model number and lot code printed on reel.
4. Plating finish: 96.5 % tin, 3% silver, and 0.5% copper

M/A-COM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with M/A-COM 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.

5

M/A-COM 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 for additional data sheets and product information.