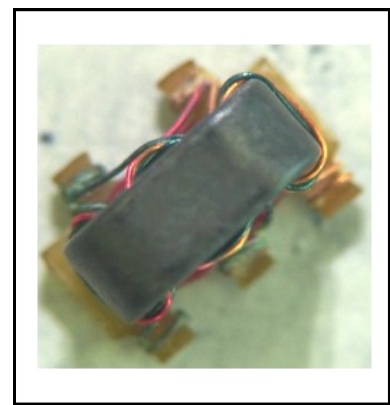


1:2.78 Transformer 45 - 1200 MHz

Rev. V2

Features

- 1:2.78 impedance ratio
- Surface mount
- Available on tape and reel
- 260°C reflow compatible
- RoHS Compliant, lead-free
- Excellent temperature stability
- Suitable for all CATV, Broadband and FTTx applications.



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

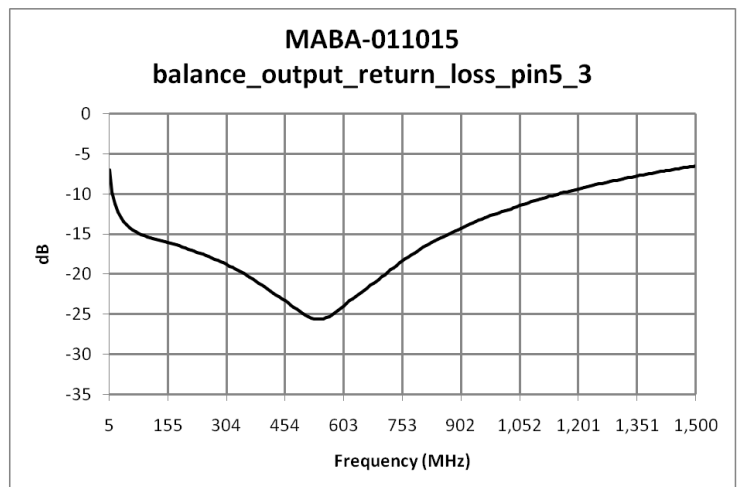
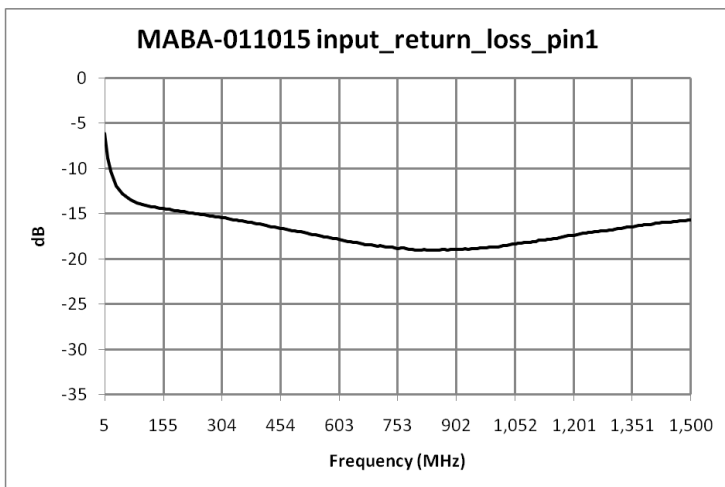
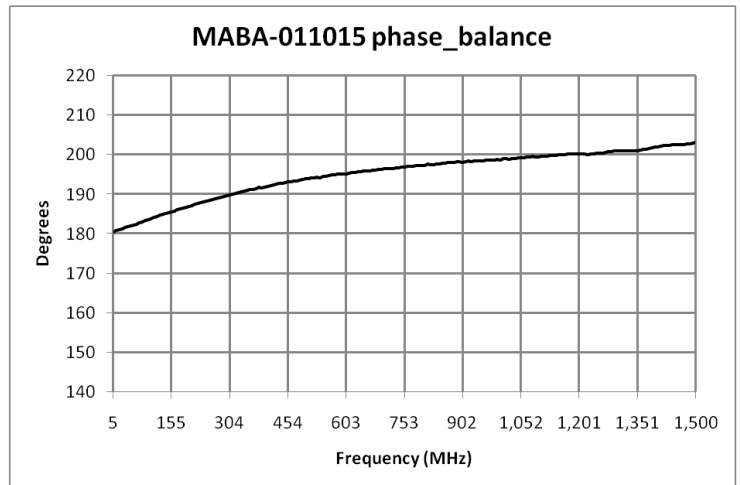
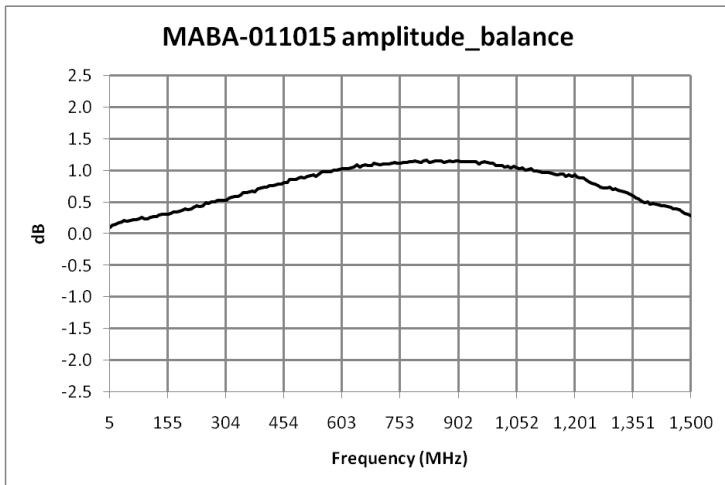
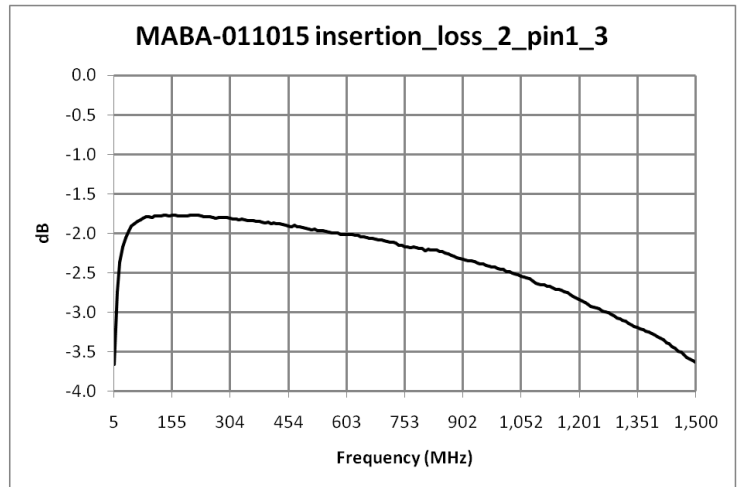
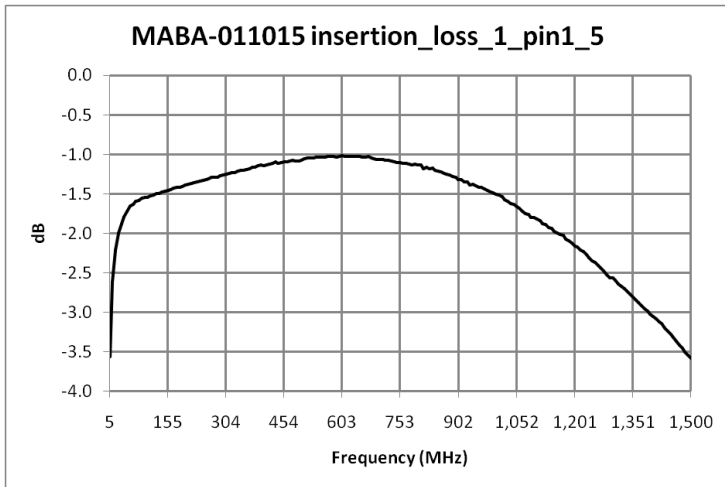
Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	45		1200
Impedance		Ω		75	
Impedance Ratio				1:2.78	
Insertion Loss (Pin1 - Pin5)	45 - 200 MHz	dB	-	1.5	2.1
	200 - 600 MHz	dB	-	1.1	1.7
	600 - 1200MHz	dB	-	1.3	3.2
Insertion Loss (Pin1 - Pin3)	45 - 200 MHz	dB	-	1.7	2.3
	200 - 600 MHz	dB	-	1.8	2.4
	600 - 1200MHz	dB	-	2.3	3.7
Amplitude Balance	45 - 200 MHz	dB	-	0.3	± 0.6
	200 - 600 MHz	dB	-	0.8	± 1.6
	600 - 1200MHz	dB	-	1.1	± 2.2
Phase Balance	45 - 200 MHz	$^\circ$	-	5	± 10
	200 - 600 MHz	$^\circ$	-	12	± 20
	600 - 1200MHz	$^\circ$	-	18	± 32
Input Return Loss (Pin1)	45 - 200 MHz	dB	-11	14	-
	200 - 700 MHz	dB	-13	17	-
	700 - 1200 MHz	dB	-12	19	-

MABA-011015



1:2.78 Transformer
45 - 1200 MHz

Rev. V2

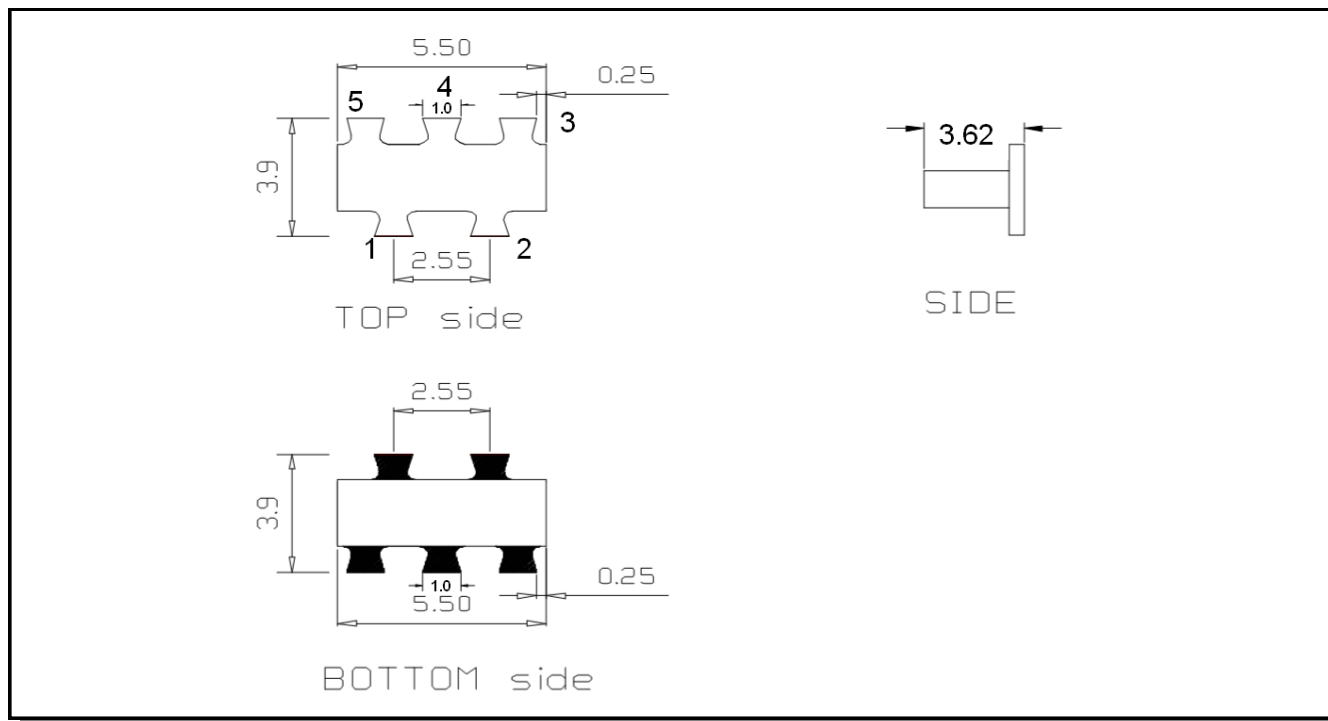


Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

1:2.78 Transformer 45 - 1200 MHz

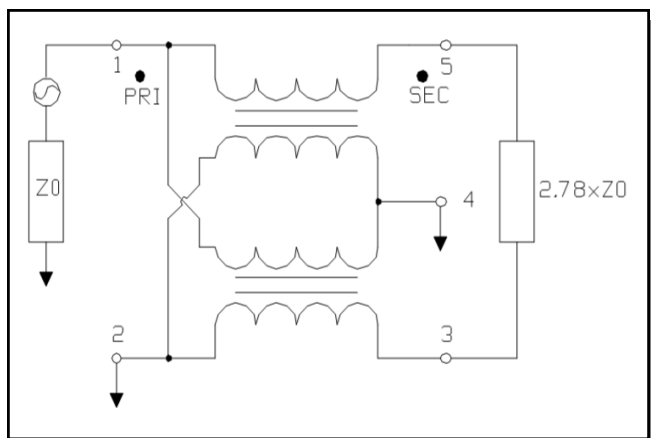
Rev. V2

Outline Drawing

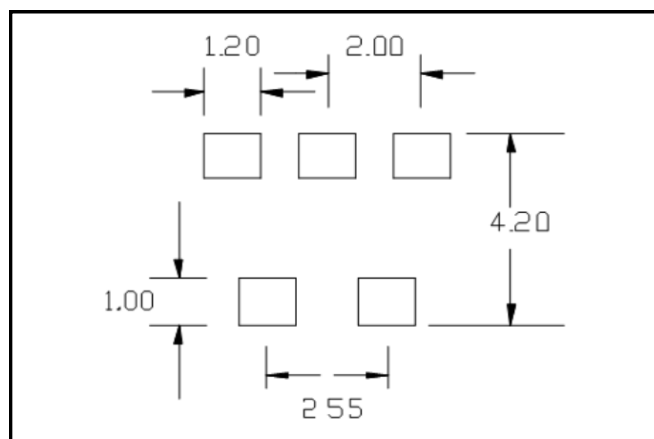


1. Dimensions in mm.
2. Tolerance: ± 0.2 mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Plating finish: ENIG

Recommended DC bias circuit



Recommended Footprint



Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Ao	mm	4.10
Bo	mm	5.80
Ko	mm	3.90
Orientation	-	F52
Reference Application Note ANI-019 for orientation		

Ordering Information

Part Number	Description
MABA-011015	Tape & Reel
MABA-011015-TB	Customer Evaluation Board

Recommended Maximum Ratings

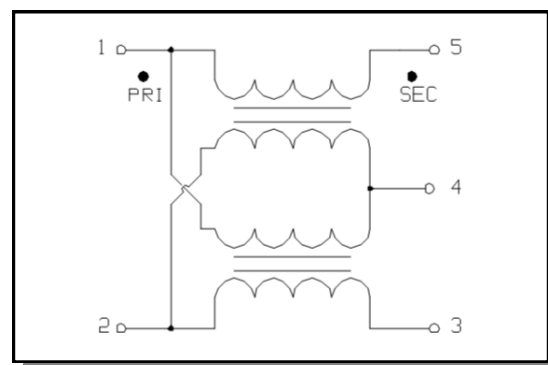
Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		200
Operating Temperature Range	°C	-40	+85

Full temperature plots available on request

Pin Configuration

Pin No.	Function
1	Primary Dot
2	Primary
3	Secondary
4	Centre Tap
5	Secondary Dot

Schematic



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.