



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!



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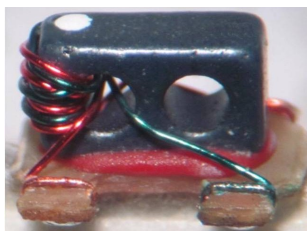


Transformer, 1:1 Transmission Line 45 - 1200 MHz

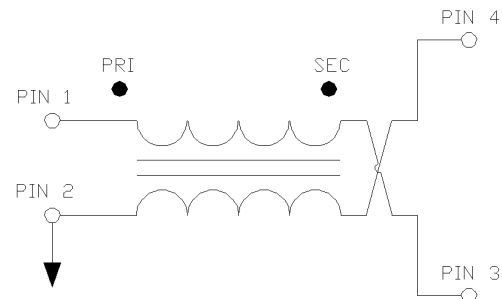
Rev. V3

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-011014	Tape & Reel
MABA-011014-TB	Evaluation Board

Pin Configuration

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

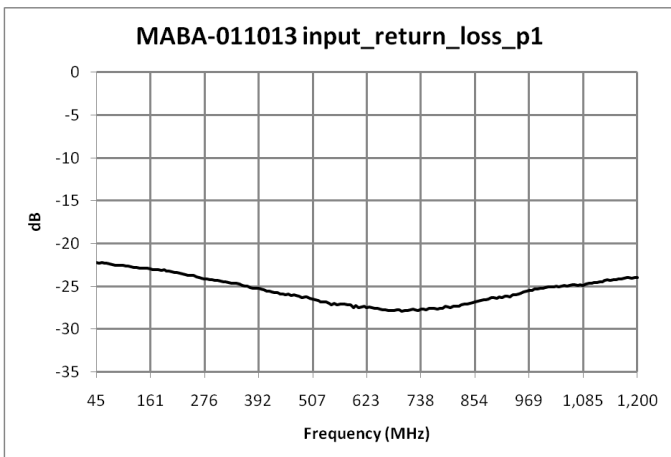
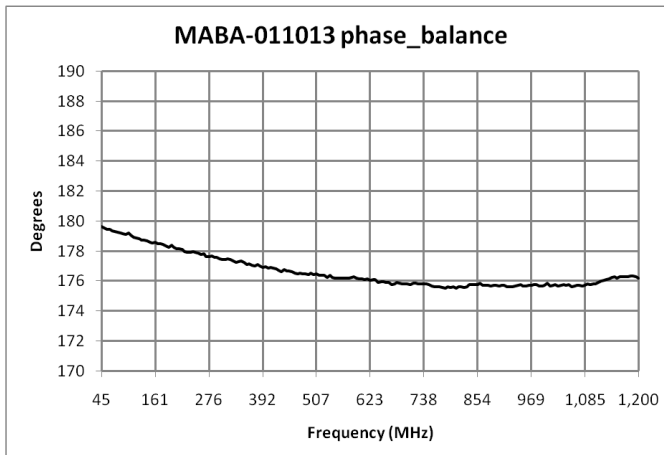
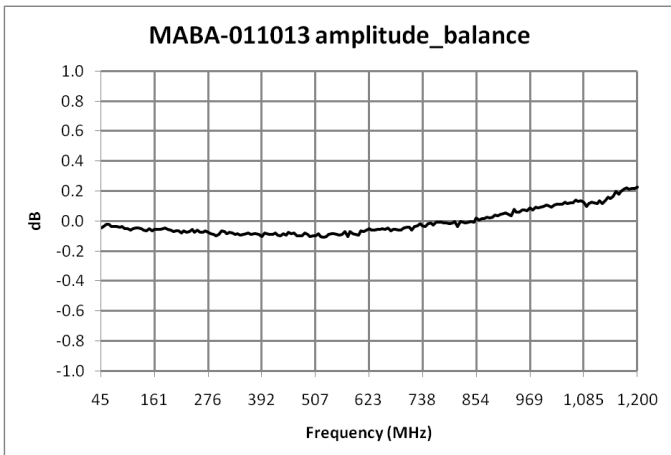
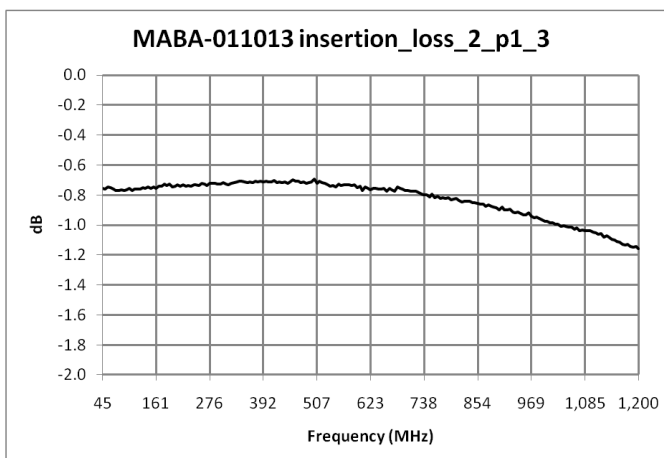
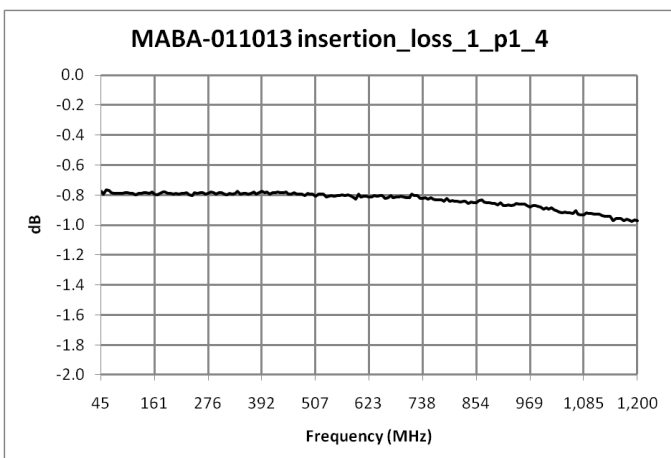
Electrical Specifications: $Z_0 = 75 \Omega$, $T_A = 25^\circ\text{C}$, $P_{IN} = 0 \text{ dBm}$

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	—	0.9	1.1
	100 - 600 MHz			0.9	1.2
	600 - 1000 MHz			1.0	1.3
	1000 - 1200 MHz			1.0	1.4
Insertion Loss (Pin1 - Pin3)	45 - 100 MHz	dB	—	-0.2	0.1
	100 - 600 MHz			-0.1	0.2
	600 - 1000 MHz			0.2	0.5
	1000 - 1200 MHz			0.35	0.7
Amplitude Balance	45 - 600 MHz	dB	—	1.1	± 1.4
	600 - 1000 MHz			0.9	± 1.5
	1000 - 1200 MHz			0.9	± 1.5
Phase Balance	45 - 600 MHz	$^\circ$	—	2	± 6
	600 - 1000 MHz			4	± 10
	1000 - 1200 MHz			4	± 10
Input Return Loss (Pin1)	45 - 600 MHz	dB	20	30	—
	600 - 1000 MHz		20	31	
	1000 - 1200 MHz		20	31	

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Transformer, 1:1 Transmission Line 45 - 1200 MHz

Rev. V3



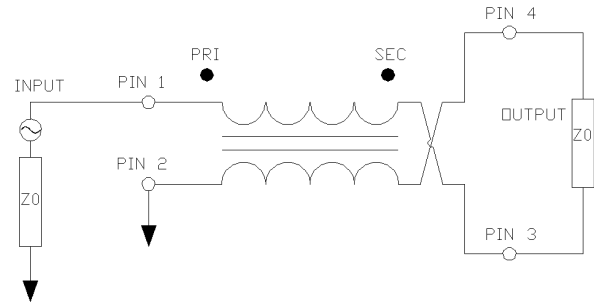
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

Recommended Maximum Ratings

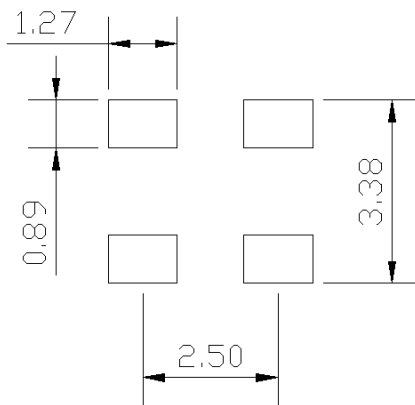
Parameter	Units
Input Power	2 W
DC Current	200 mA
Operating Temperature	-40°C to +100°C

Temperature data available on request

Application Circuit



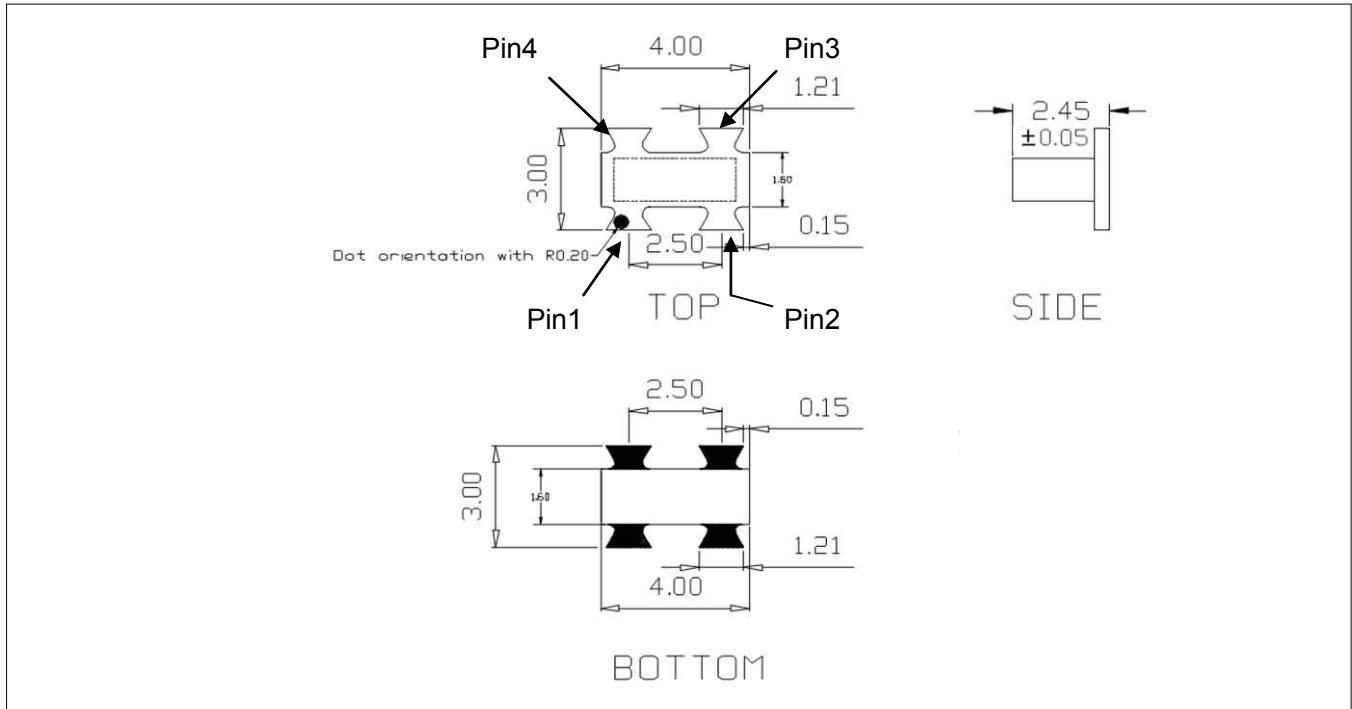
Recommended Footprint



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

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5

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