THE DATASHEET OF

MABA-011013

www.win-source.net 0086-755-83957316

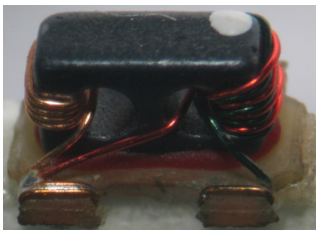
MABA-011013

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

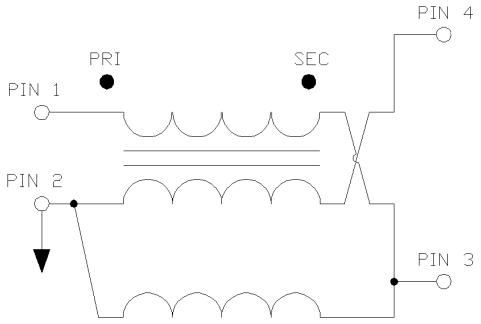
Rev. V3

Features

- 1:1 Impedance Ratio
- Surface Mount
- Available on tape and reel
- 260ºC 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 Ω, T_A = 25°C, P_{IN} = 0 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 100 - 600 MHz 600 - 1200 MHz	dB	—	0.8 0.8 0.9	1.4 1.1 1.3
Insertion Loss (Pin1 - Pin3)	45 - 100 MHz 100 - 600 MHz 600 - 1200 MHz	dB	—	0.8 0.7 0.9	1.4 1.1 1.5
Amplitude Balance	45 - 600 MHz 600 - 1200 MHz	dB	—	0.2 0.3	±0.5 ±1.1
Phase Balance	45 - 600 MHz 600 - 1200 MHz	°	—	2 3	±6 ±10
Input Return Loss (Pin1)	45 - 600 MHz 600 - 1200 MHz	dB	20 15	24 25	—

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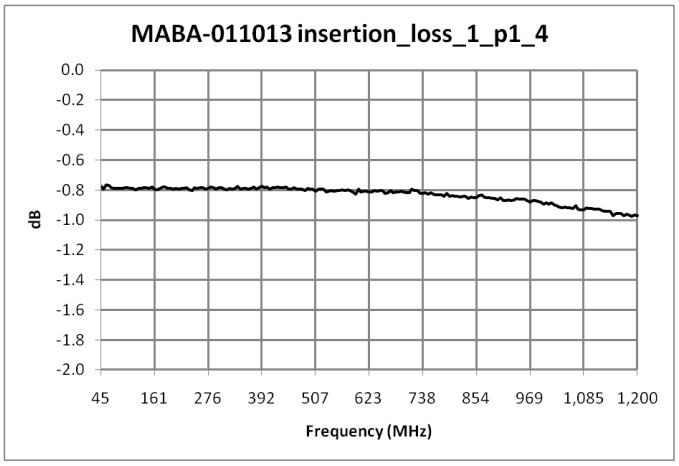

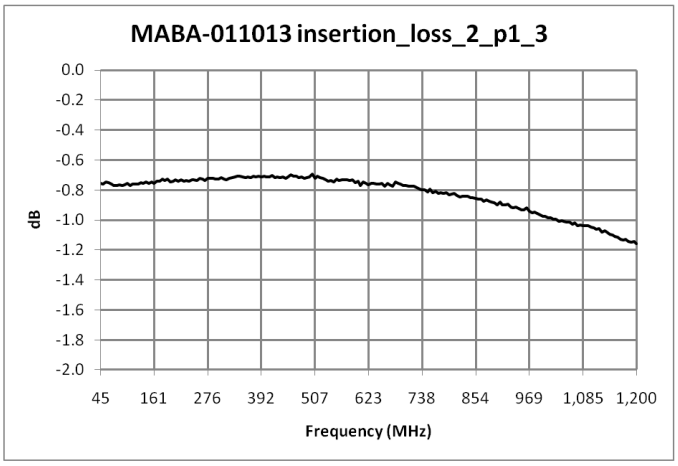

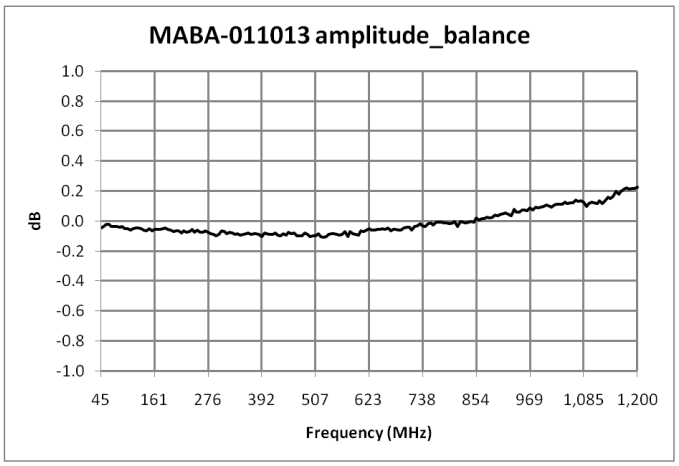

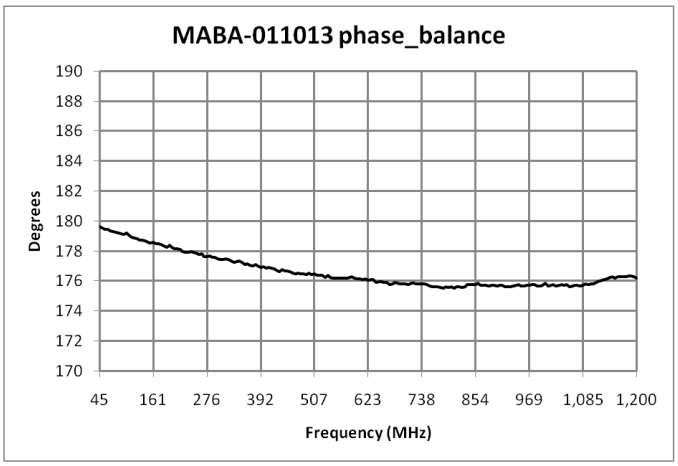

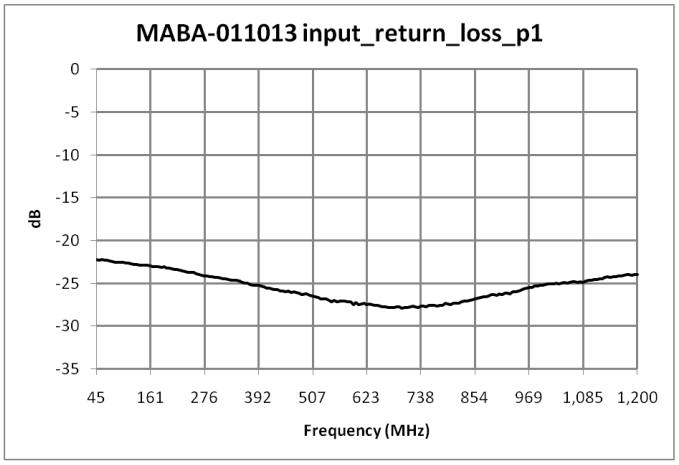

Electrical Specifications: Z_0 = 75Ω, T_A = 25°C, P_{in} = 0dBm

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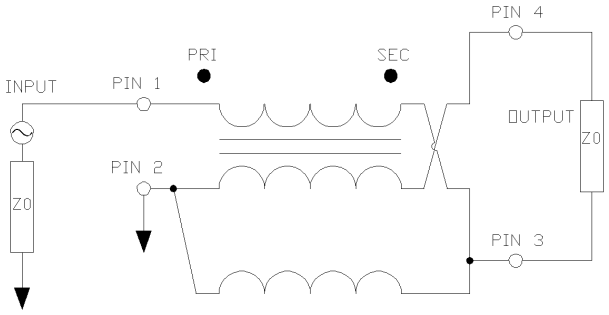
Recommended Maximum Ratings

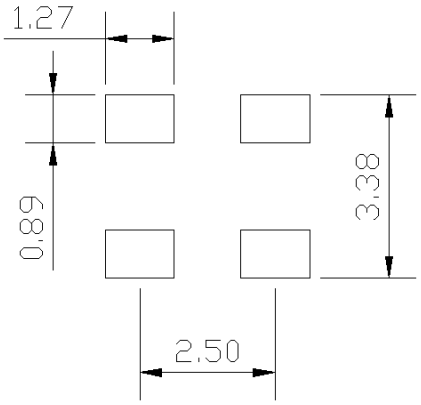
Parameter	Units
Input Power	2 W
DC Current	200 mA
Operating Temperature	-40ºC to +100ºC

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		

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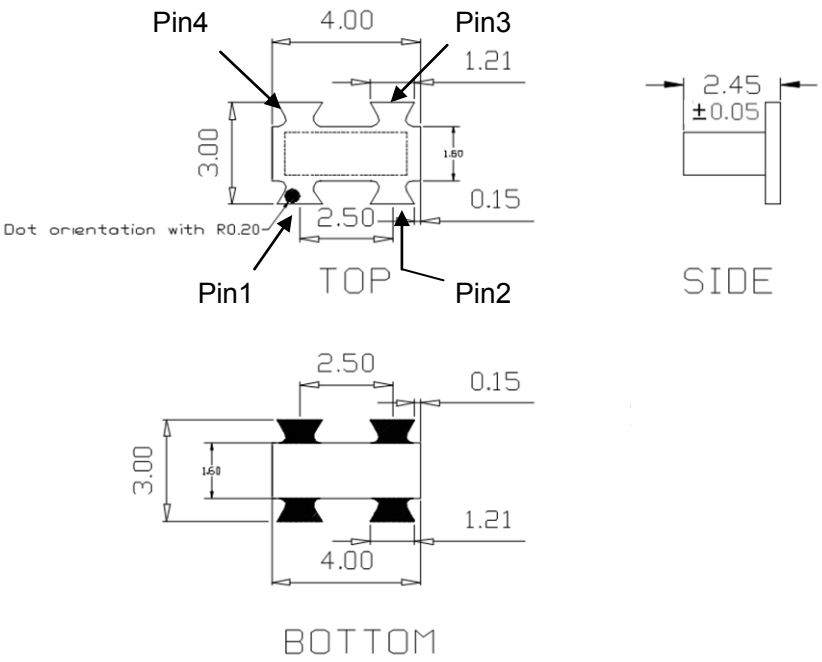
Outline Drawing



1. Dimensions in mm.
2. Tolerance: ±0.2mm 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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