

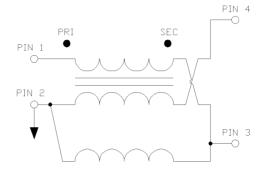
Rev. V3

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		

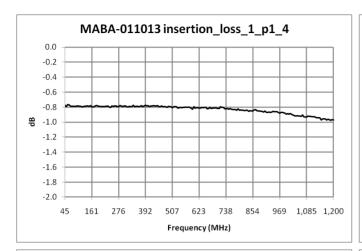
Electrical Specifications: $Z_0 = 75 \Omega$, $T_A = 25$ °C, $P_{IN} = 0 \text{ dBm}$

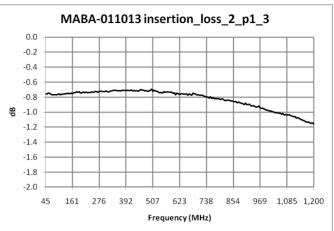
Parameter	Conditions	Units	Min.	Тур.	Max.
Frequency Range	_	MHz	45		1200
Impedance	_	Ω	_	75	_
Impedance Ratio	_	Ratio	_	1:1	_
Insertion Loss (Pin1 - Pin4)	45 - 100 MHz 100 - 600 MHz 600 - 1200 MHz	dB	_	0.8 0.8 0.9	1.4 1.1 1.3
Insertion Loss (Pin1 - Pin3)	45 - 100 MHz 100 - 600 MHz 600 - 1200 MHz	dB	_	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	0	_	2 3	±6 ±10
Input Return Loss (Pin1)	45 - 600 MHz 600 - 1200 MHz	dB	20 15	24 25	_

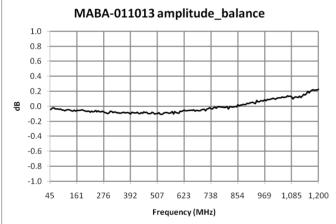
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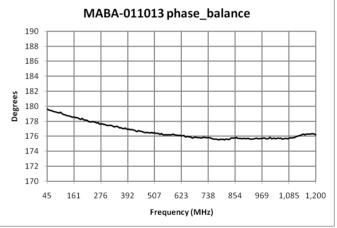


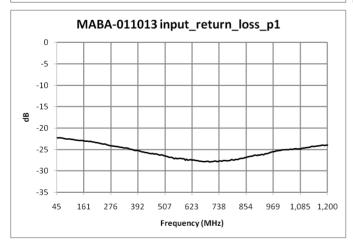
Rev. V3











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



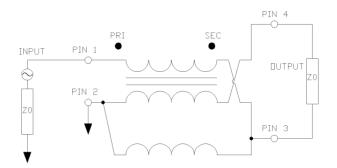
Rev. V3

Recommended Maximum Ratings

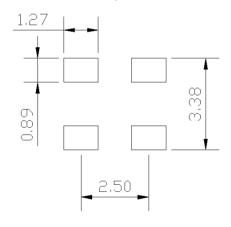
Parameter	Units		
Input Power	2 W		
DC Current	200 mA		
Operating Temperature	-40°C to +100°C		

Temperature data available on request

Application Circuit



Recommended Footprint



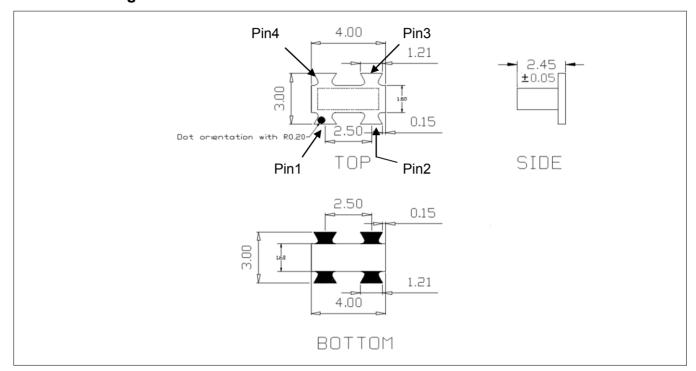
Tape & Reel Information

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				



Rev. V3

Outline Drawing



- 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

MABA-011013



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

Rev. V3

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