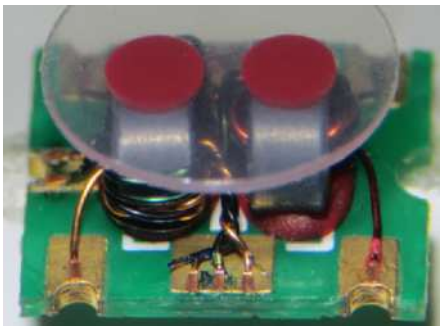
MABA-011029

Transformer, 1:2 Transmission Line Balun
5 MHz - 1200 MHz

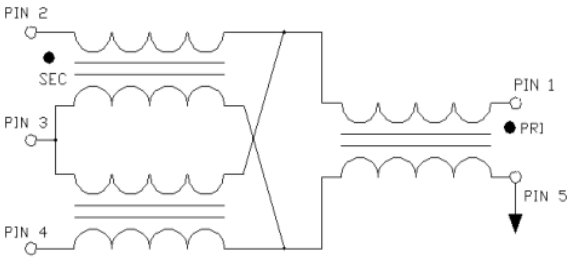
Rev. V3

Features

- 1:2 impedance ratio
- Transmission line Transformer
- Surface mount
- Available on tape and reel
- 260ºC reflow compatible
- RoHS Compliant and Pb free
- Excellent temperature stability
- Can be used on 50Ω and 75Ω systems



Schematic



Pin Configuration

Pin No.	Function
1	Input (PRI dot)
2	Output 1 (SEC dot)
3	Centre tap (RF Ground)
4	Output 2 (SEC)
5	Ground (PRI)

Ordering Information

Part Number	Description
MABA-011029	Tape & Reel
MABA-011029-TB	Customer Evaluation Board

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Transformer, 1:2 Transmission Line Balun
5 MHz - 1200 MHz

Rev. V3

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

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	5		1200
Impedance		Ω		75	
Impedance Ratio				1:2	
Insertion Loss 1 (Pin 1 to pin 2)	5 - 50 MHz 50 - 400 MHz 400 -1000 MHz 1000 -1200 MHz	dB dB dB dB	- - - -	0.30 0.50 0.90 1.60	0.40 0.80 2.00 2.70
Insertion Loss 2 (Pin 1 to pin 4)	5 - 50 MHz 50 - 400 MHz 400 -1000 MHz 1000 -1200 MHz	dB dB dB dB	- - - -	0.50 0.70 1.50 2.40	0.60 1.20 3.00 3.90
Amplitude Balance	5 - 50 MHz 50 - 400 MHz 400 -1200 MHz	dB dB dB	-0.30 -0.90 -2.20	0.10 0.20 0.50	0.30 0.90 2.20
Phase Balance	5 - 50 MHz 50 - 400 MHz 400 -1000 MHz	° ° °	-2.0 -6.0 -9.0	0.20 0.70 0.50	2.0 6.0 9.0
Input Return Loss (Pin 1)	5 - 50 MHz 50 - 400 MHz 400 -1000 MHz 1000 -1200 MHz	dB dB dB dB	20 18 9 7	27 28 16 12	- - - -

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		600
Operating Temperature Range	ºC	-40	+85

Temperature data available on request

Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	900
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	12.00
Ao	mm	6.70
Bo	mm	7.50
Ko	mm	3.60
Orientation	-	F33
Reference Application Note ANI-019 for orientation		

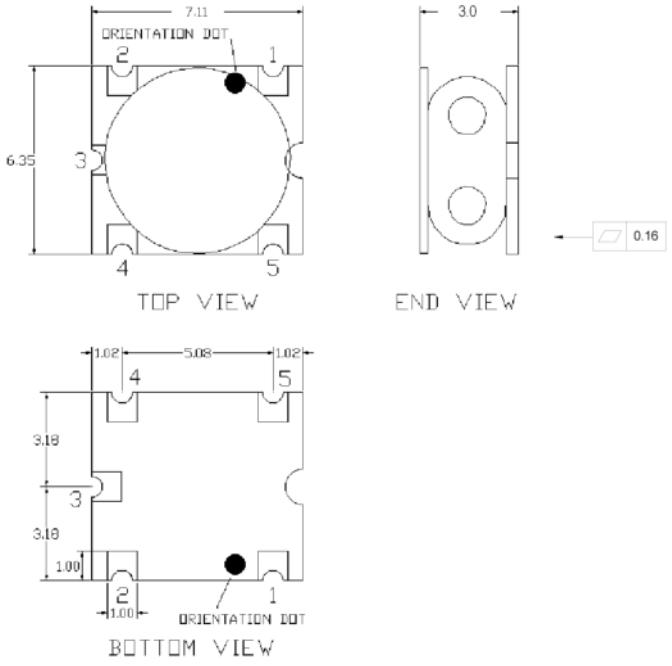
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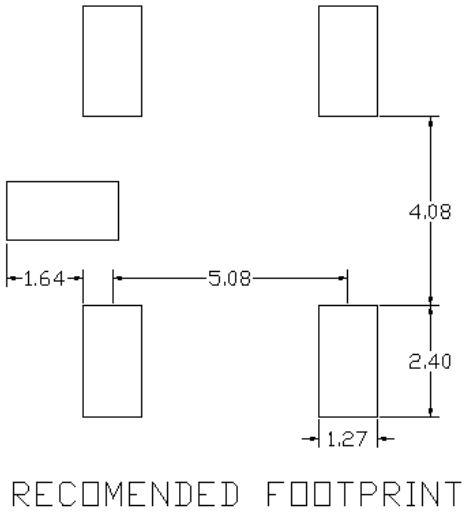
Transformer, 1:2 Transmission Line Balun
5 MHz - 1200 MHz

Rev. V3

Outline Drawing

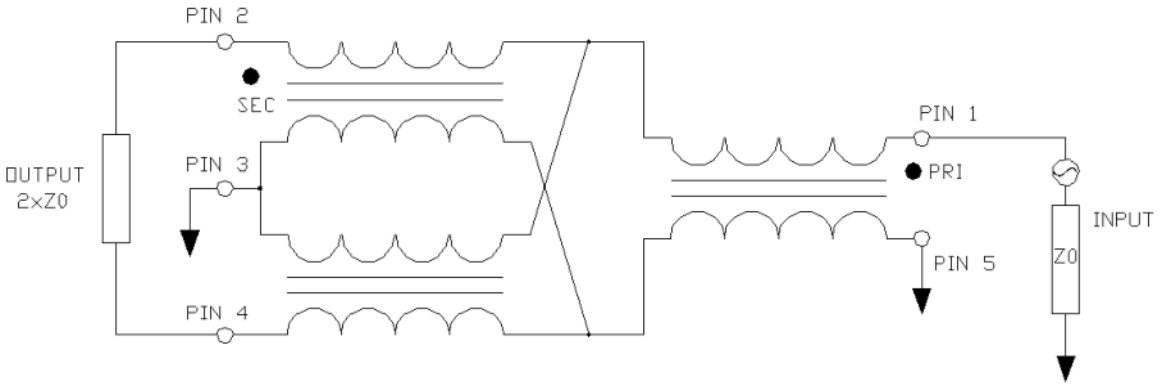


Recommended Footprint



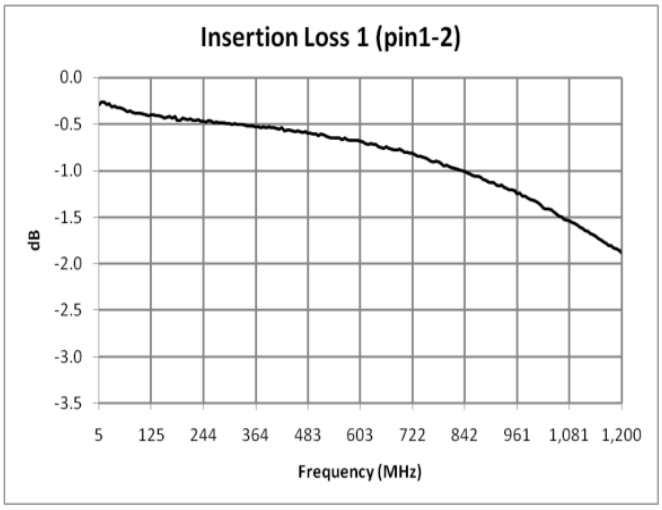
1. Dimensions in mm.
2. Tolerance: ±0.2mm unless otherwise noted.
3. Model number and lot code printed on reel.
4. Plating finish: ENIG on both sides, 0.05 to 0.1 µm gold over 3 to 6 µm nickel

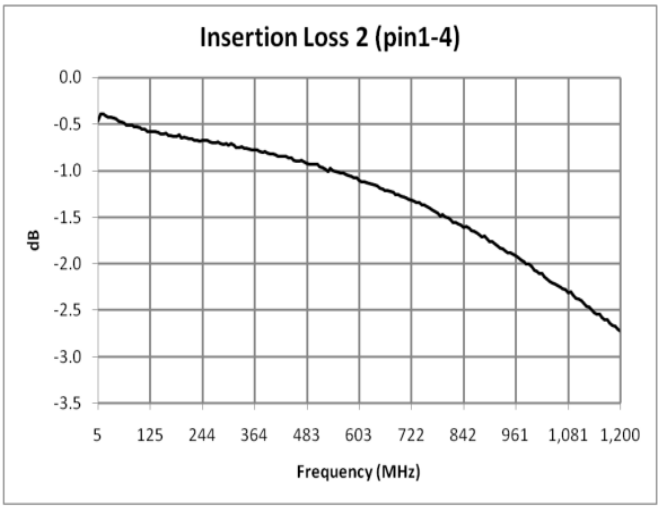
Application Circuit

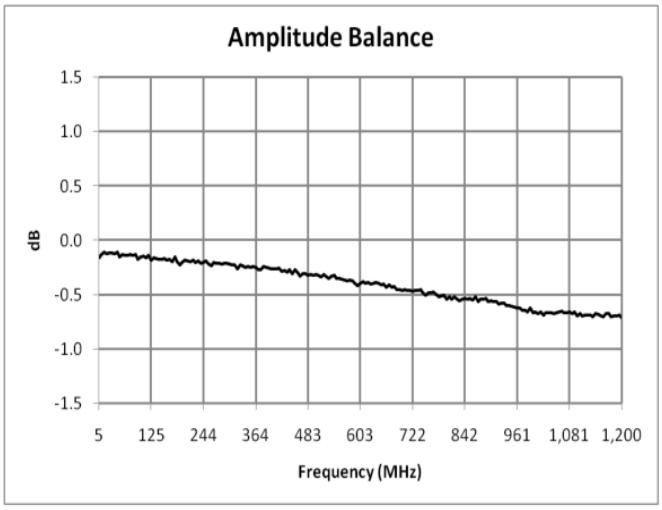


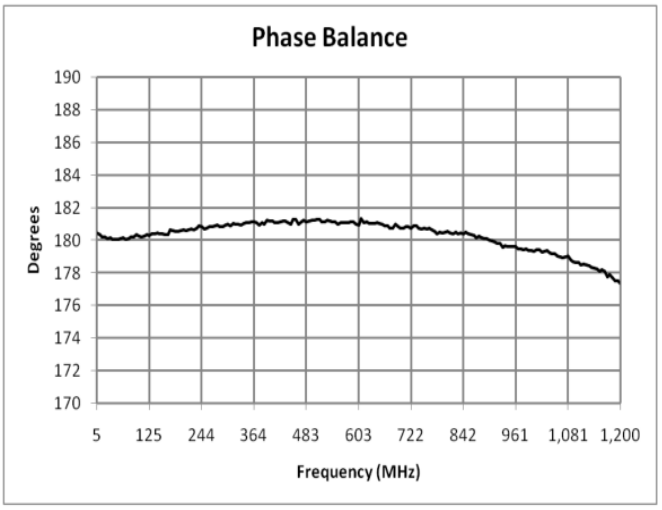
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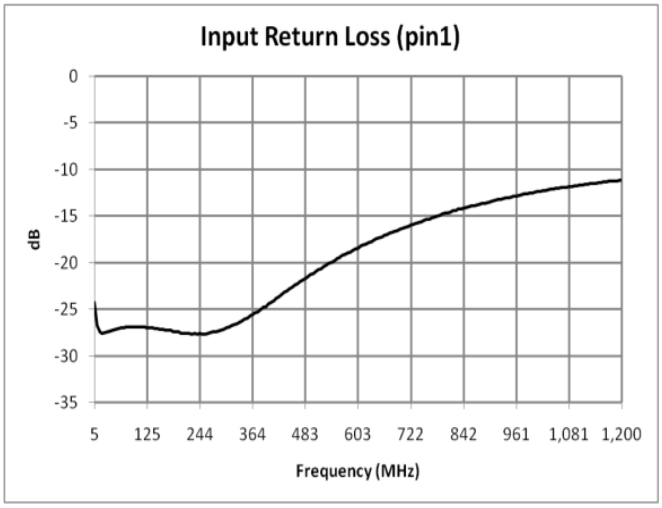
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