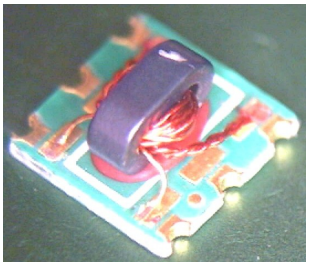
MABA-011031

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

Rev. V1

Features

- Surface mount
- 1:1 Impedance ratio
- 260°C reflow compatible
- RoHS* compliant, Pb-Free
- Available on tape and reel.



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				1:1	
Insertion Loss	5 - 1200MHz	dB	-	0.2	0.8
Amplitude Balance	5 - 1200MHz	dB	-0.9	0.7	0.9
Phase Balance	5 - 200MHz 200 - 1200MHz	° °	-4.0 -9.0	3.0 7.0	4.0 9.0
Input Return Loss	5 - 200MHz 200 - 400MHz 400 - 1000MHz 1000 - 1200MHz	dB dB dB dB	20 18 16 14	21 23 20 20	- - - -

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.43537383 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

Transformer, 1:1 Transmission Line
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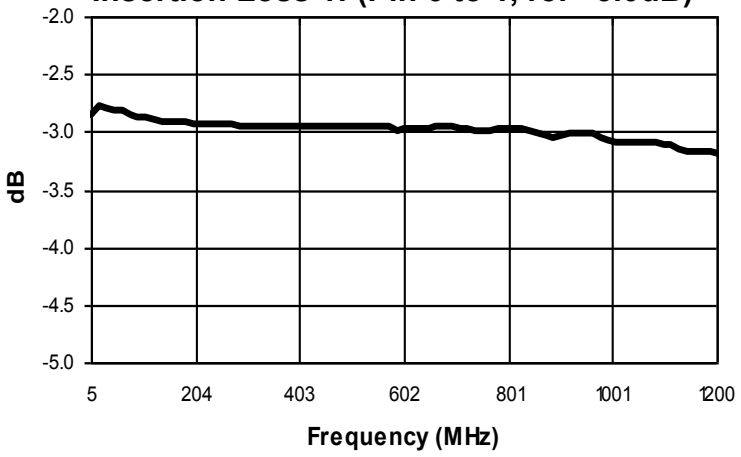
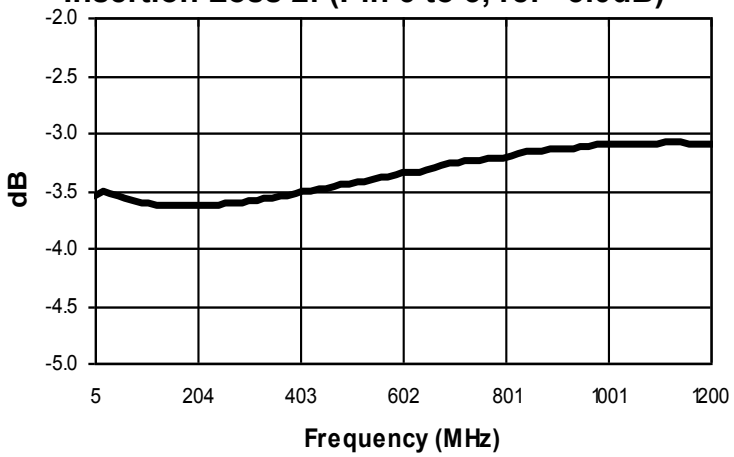
Electrical Specifications: Z_0 = 75Ω, T_A = 25°C, P_{in} = 0dBm

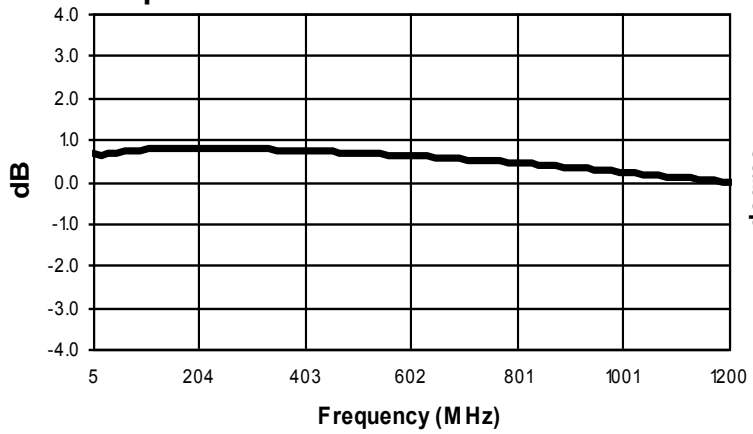
Insertion Loss 1: (Pin 6 to 1, ref –3.0dB)



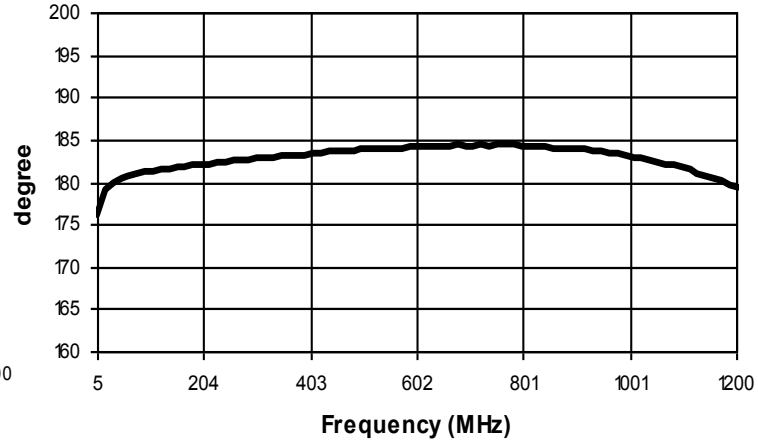
Insertion Loss 2: (Pin 6 to 3, ref –3.0dB)



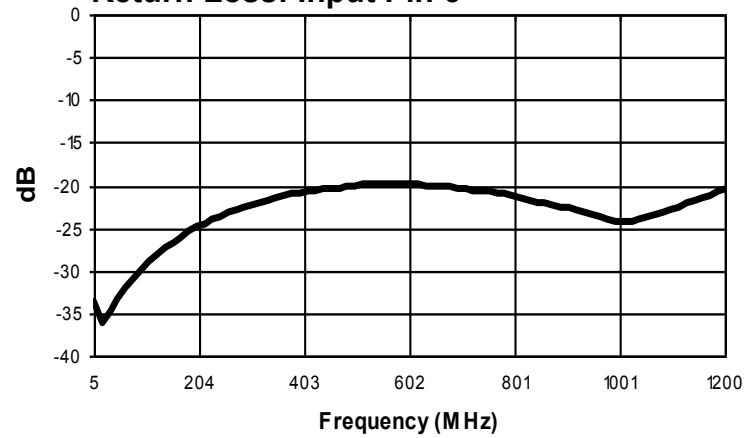
Amplitude Balance



Phase Balance



Return Loss: Input Pin 6



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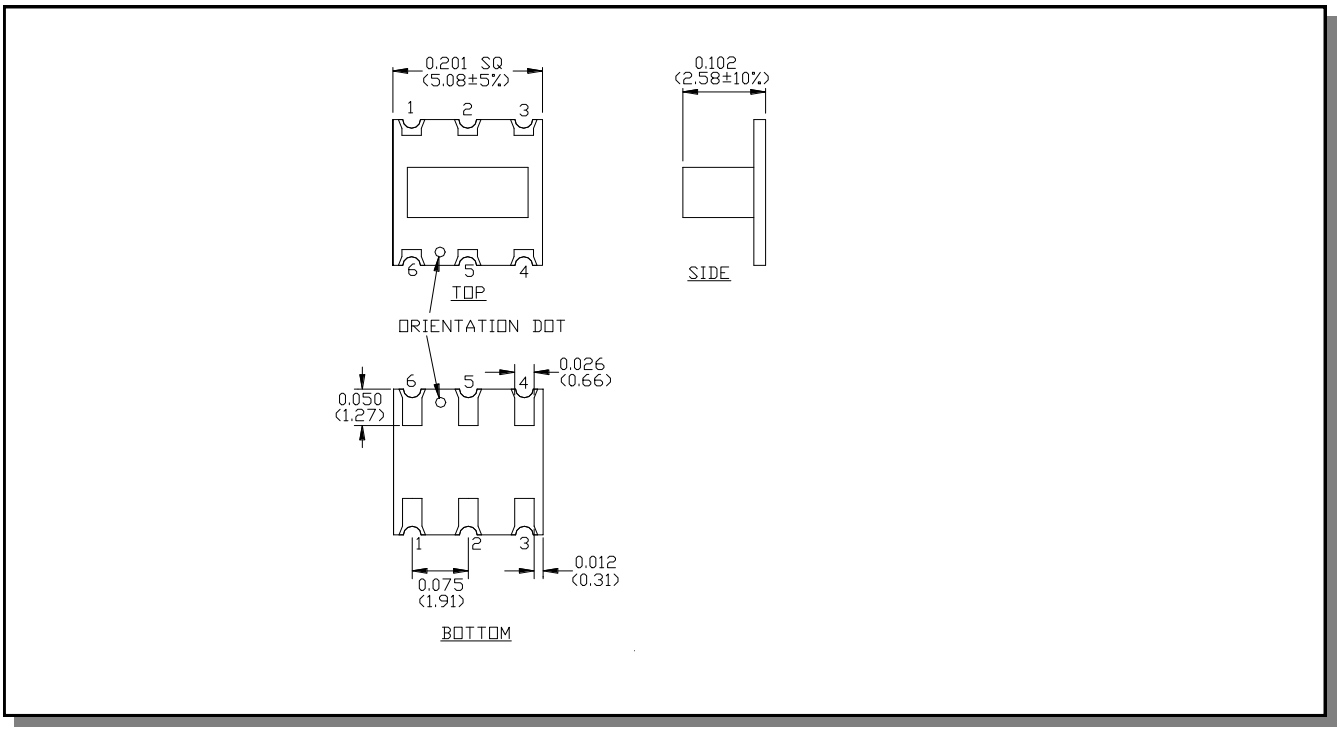
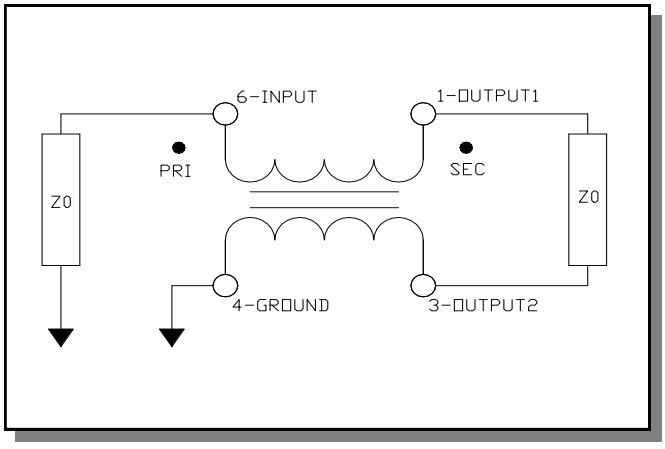
Outline Drawing

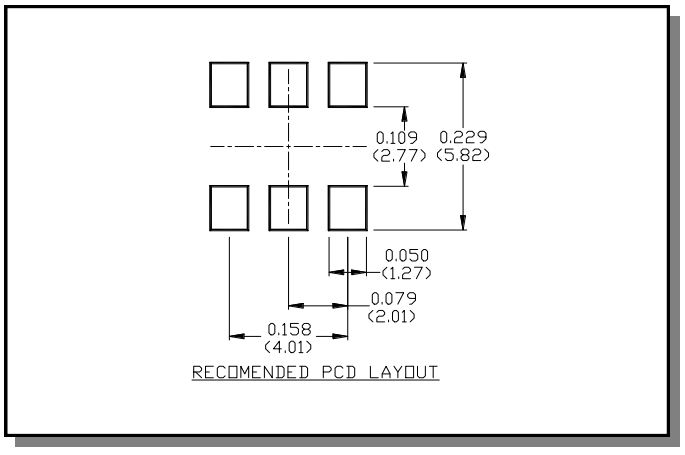


1. Dimensions in mm.
2. Tolerance: ±0.2mm unless otherwise noted.
3. Model number and lot code printed on reel.
4. Plating finish: ENIG on both sides

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	5.3
B_0	mm	5.3
K_0	mm	2.7
Orientation	-	F53
Reference Application note ANI-019 for orientation		

Ordering Information

Part Number	Description
MABA-011031	Tape & Reel

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		+24dBm (250mW)
DC Current	mA		30
Operating Temperature Range	ºC	-40	+85

Temperature data available on request

Pin Configuration

Pin No.	Function
1	Secondary Dot (output1)
2	Not Used (Ground)
3	Secondary (output2)
4	Primary (ground)
5	Not Used (Ground)
6	Primary Dot

Schematic