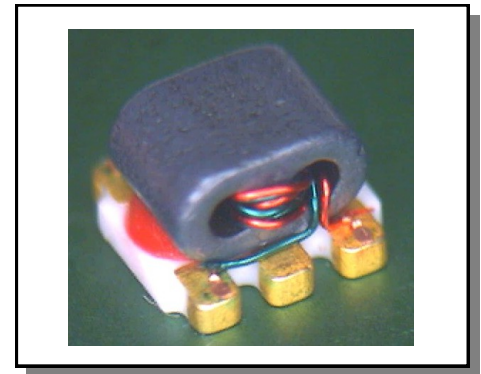


Transformer, 1:1 Transmission Line 46MHz - 1002MHz

Rev. V2

Features

- Surface mount
- Wide Frequency Range
- 260°C reflow compatible
- RoHS* compliant and lead free
- Available on Tape and Reel



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

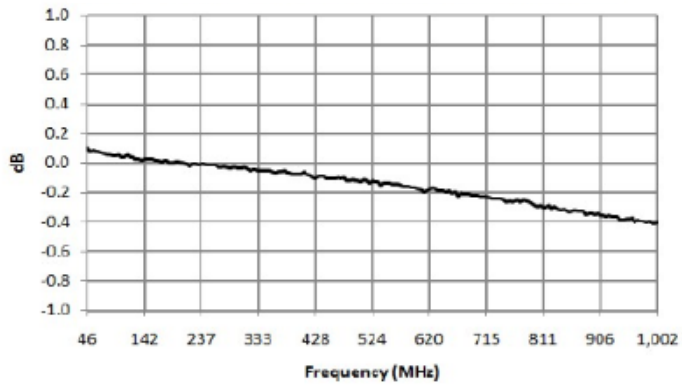
Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	46		1002
Impedance		Ω		75	
Impedance Ratio				1:1	
Insertion Loss (Pin4 - Pin3)	46 - 1002MHz	dB	-	0.1	0.6
Insertion Loss (Pin4 - Pin1)	46 - 1002MHz	dB	-	0.4	0.7
Amplitude Balance	46 - 1002MHz	dB	-0.8	0.3	0.8
Phase Balance	46 - 100MHz 100 - 1002MHz	$^\circ$ $^\circ$	-5.0 -2.5	2.4 1.2	5.0 2.5
Input Return Loss (Pin4)	46 - 300MHz 300 - 1002MHz	dB dB	25 17.5	42 30	- -

Transformer, 1:1 Transmission Line 46MHz - 1002MHz

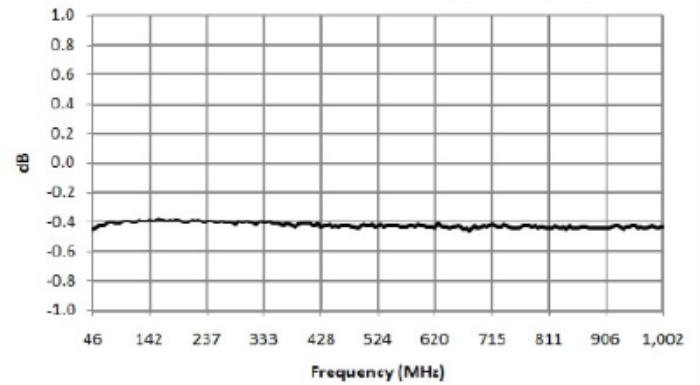
Rev. V2

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

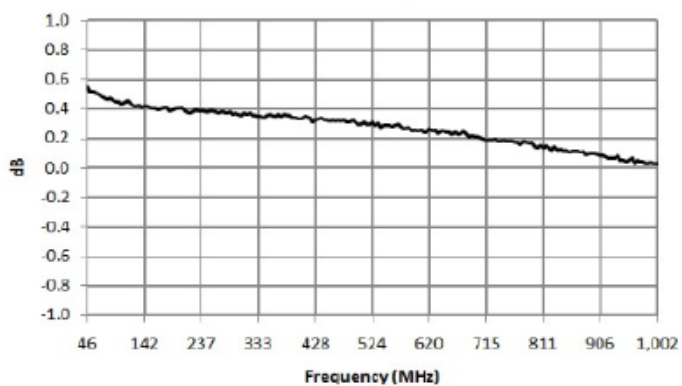
MABA-011030 Insertion Loss 1 (pin4-3)



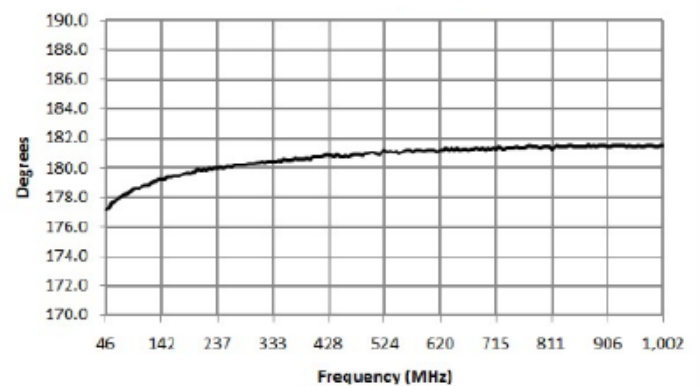
MABA-011030 Insertion Loss 2 (pin4-1)



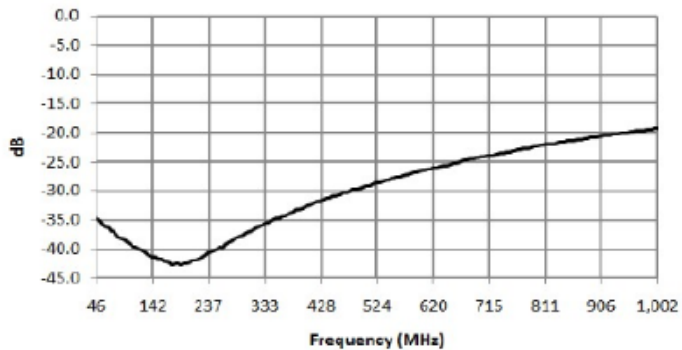
MABA-011030 Amplitude Balance



MABA-011030 Phase Balance



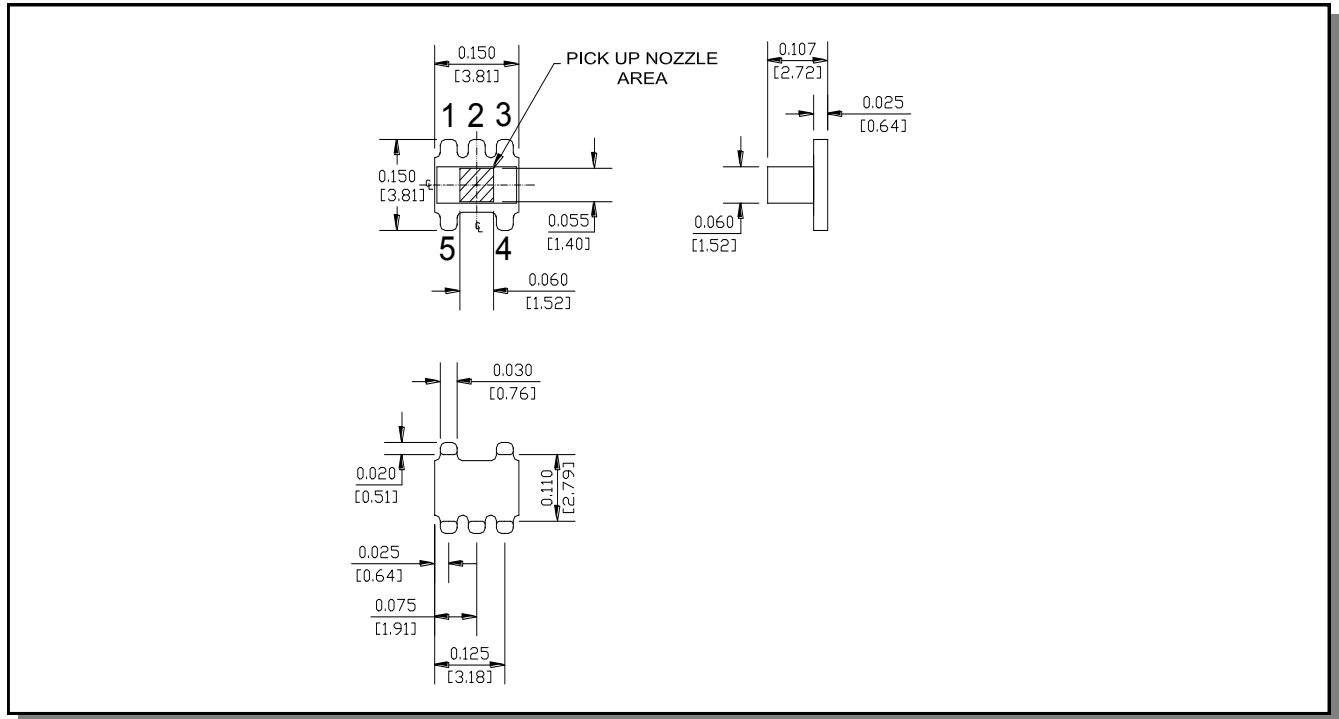
**MABA-011030 Input Return Loss
(pin4)**



Transformer, 1:1 Transmission Line 46MHz - 1002MHz

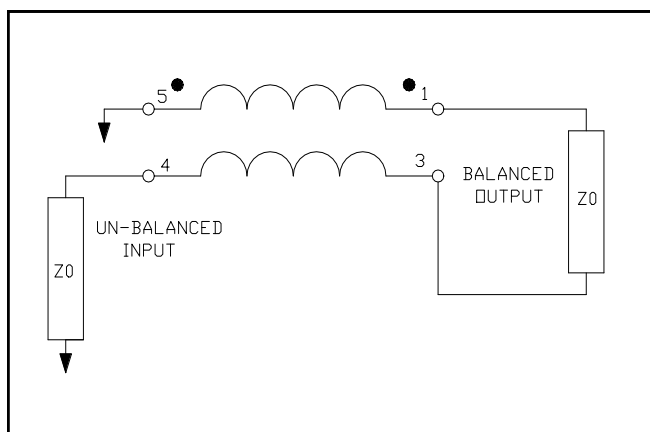
Rev. V2

Outline Drawing

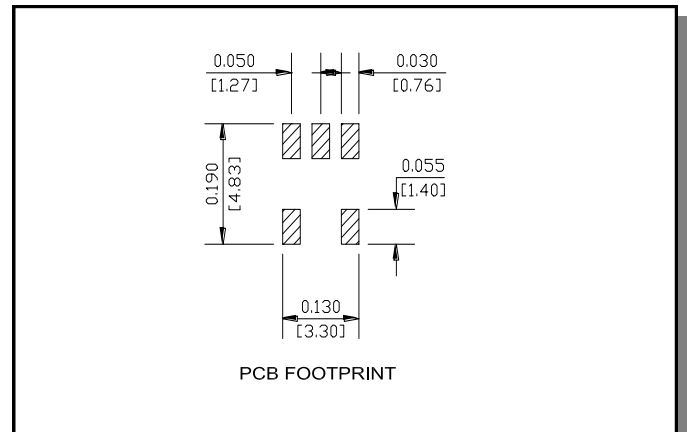


1. Dimensions in mm.
2. Tolerance: $\pm 0.2\text{mm}$ unless otherwise noted.
3. Model number and lot code printed on reel.
4. Plating finish: ENIG on both sides

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	4.05
B ₀	mm	4.30
K ₀	mm	3.45
Orientation	-	F5
Reference Application note ANI-019 for orientation		

Ordering Information

Part Number	Description
MABA-011030	Tape & Reel

Recommended Maximum Ratings

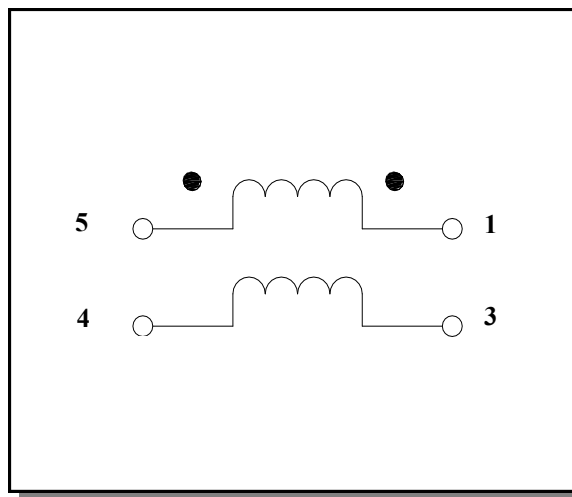
Parameter	Units	Min	Max
Input Power	mW		+24dBm (250mW)
DC Current (tested at 5V)	mA		600
Operating Temperature Range	°C	-40	+85

Temperature data available on request

Pin Configuration

Pin No.	Function
1	Secondary Dot (Output 2)
2	Not Used (Ground)
3	Secondary (Output 1)
4	Primary (input)
5	Primary Dot (ground)

Schematic



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