## MABA-011030

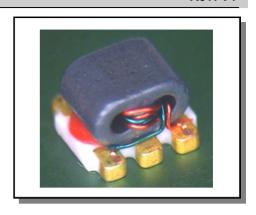


# Transformer, 1:1 Transmission Line 46MHz - 1002MHz

Rev. V1

#### **Features**

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



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

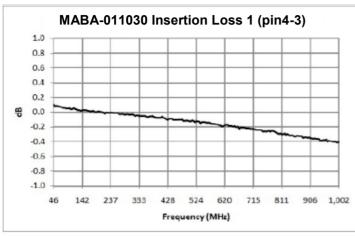
Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	46		1002
Impedance		Ω		75	
Impedance Ratio				1:1	
Insertion Loss (Pin4 - Pin3)	46 - 1002MHz	dB	-	0.1	0.6
Insertion Loss (Pin4 - Pin1)	46 - 1002MHz	dB	-	0.4	0.7
Amplitude Balance	46 - 1002MHz	dB	-0.8	0.3	0.8
Phase Balance	46 - 100MHz 100 - 1002MHz	0	-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	-

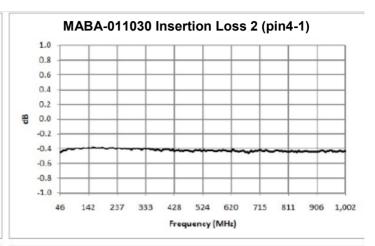


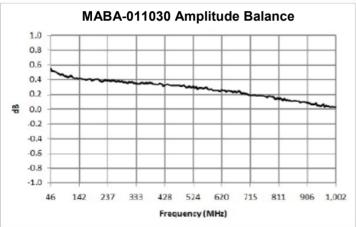
Transformer, 1:1 Transmission Line 46MHz - 1002MHz

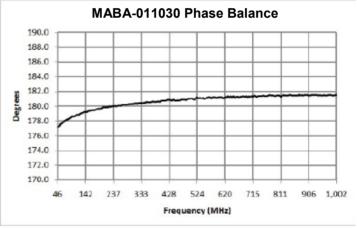
Rev. V1

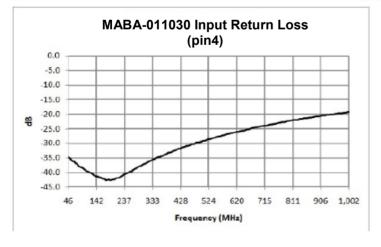
**Electrical Specifications:**  $Z_0 = 75\Omega$ ,  $T_A = 25$ °C,  $P_{in} = 0$ dBm









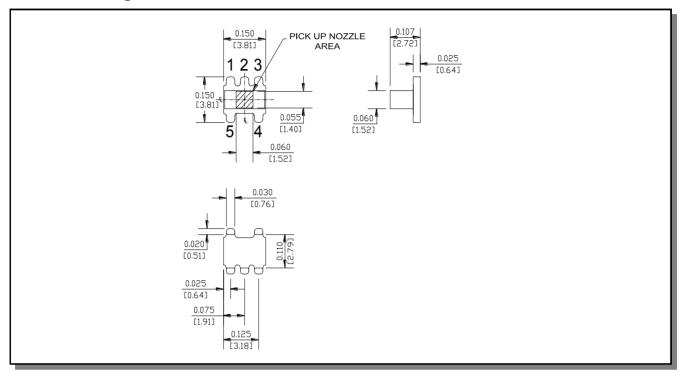




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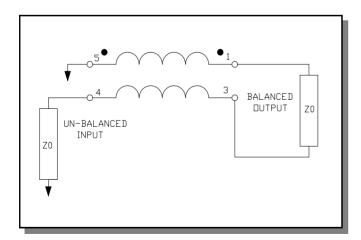
Rev. V1

#### **Outline Drawing**

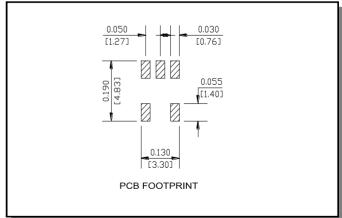


- 1. Dimensions in mm.
- Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code printed on reel.
- 4. Plating finish: ENIG on both sides

## **Application Circuit**



#### **Recommended Footprint**





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

Rev. V1

#### **Tape & Reel Information**

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width (W)	mm	12.00
Pitch (P <sub>1</sub> )	mm	8.00
A <sub>0</sub>	mm	4.05
B <sub>0</sub>	mm	4.30
K <sub>0</sub>	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**

