

## E-Series RF 1:4 Transmission Line Step-up Transformer 2-1000 MHz

Rev. V2

### Features

- 1:4 Impedance Ratio
- Surface Mount
- Wide frequency range
- Tape and reel packaging available
- 260°C Reflow Compatible
- RoHS\* compliant

### Description

M/A-COM's MABA-011037 is a RoHS compliant 1:4 RF transmission line transformer in a low cost, surface mount package. The windings of the MABA-011037 are welded to the package substrate for improved reliability and to eliminate lead content. Ideally suited for high volume cellular and wireless application. Parts are packaged in tape & reel.

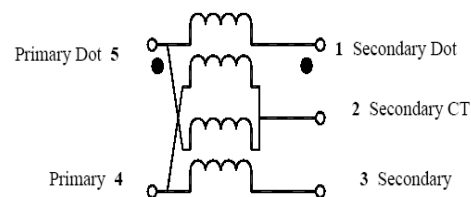
### Absolute Maximum Ratings<sup>1,2</sup>

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	240 mA <sup>2</sup>
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

### Product Image



### Functional Schematic



### Pin Configuration<sup>3</sup>

Pin No.	Function
1	Secondary Dot
2	Secondary CT
3	Secondary
4	Primary
5	Primary Dot

### Electrical Specifications: $T_A = 25^\circ\text{C}$ , $Z_0 = 50\Omega$

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	-	2.0 - 1000	MHz	-	-	-
Insertion Loss	-	3.0 - 500	dB	-	0.7	1.0
		2.0 - 700	dB	-	-	2.0
		2.0 - 1000	dB	-	-	3.0
Amplitude Unbalance	-	2.0 - 700	dB	-	-	1
		700 - 1000	dB	-	-	2
Phase Unbalance	-	2.0 - 1000	Degrees	-	-	10
Input Return Loss	-	2 - 200	dB	40	32	15

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\* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

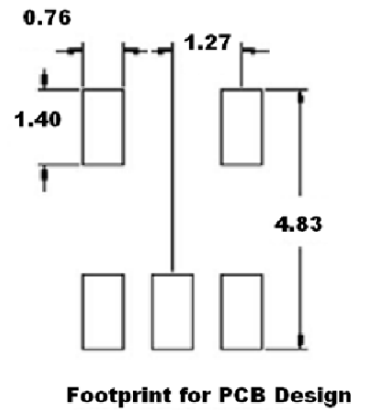
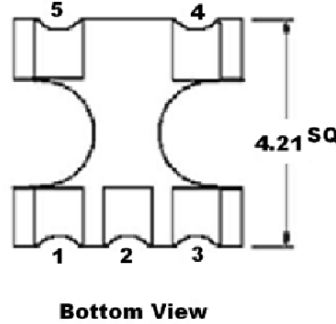
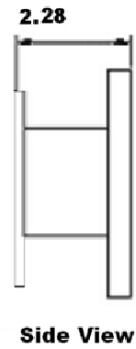
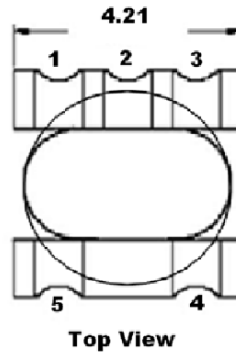
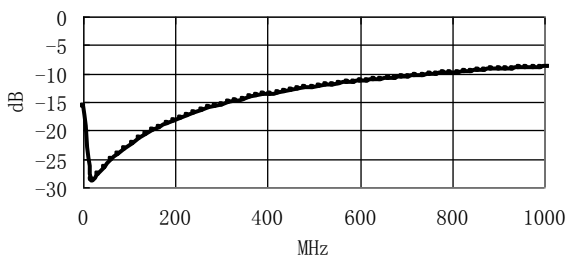
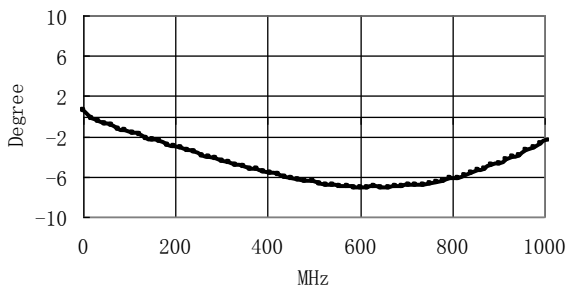
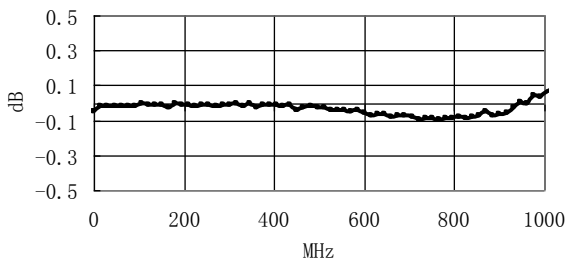
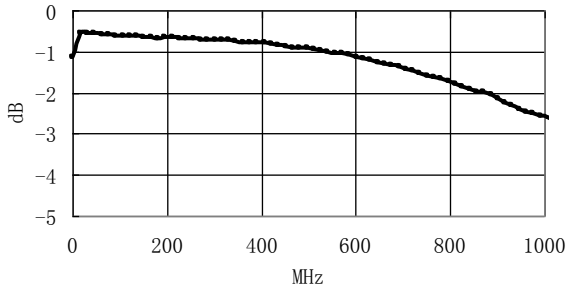
# MABA-011037



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### Typical Performance Curves at +25°C



**Dimensions in mm. Tol: .xx ±.20**

## Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width (W)	mm	8.0
Pitch (P <sub>1</sub> )	mm	12.0
A <sub>0</sub>	mm	4.5
B <sub>0</sub>	mm	4.5
K <sub>0</sub>	mm	2.73
Orientation	-	F55

Reference Application Note ANI-019 for orientation

## Ordering Information

Part Number	Description
MABA -011037	Tape & Reel

## Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		200
Operating Temperature Range	°C	-40	+85
Storage Temperature Range	°C	-55	+125

Temperature data available on request

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