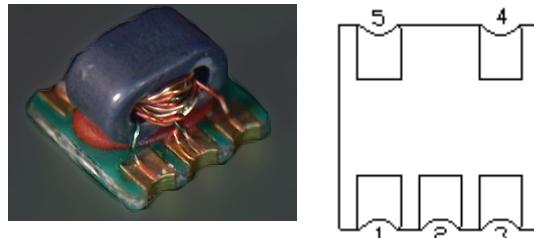


1:1 Transmission Line Transformer 4.5 - 3000 MHz

Rev. V2

Features

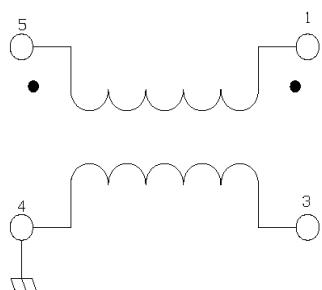
- Surface Mount Package
- 1:1 Impedance
- Wide Frequency Range
- RoHS Compliant, Lead Free
- Available on Tape and Reel



Description

The MABA-009822-715254 is a 1:1 RF transmission line transformer in a surface mount package. The windings are welded to the package substrate for improved reliability and to eliminate Pb content. Ideally suited for high volume cellular and wireless application.

Schematic



Pin Configuration

Pin No.	Function
1	Secondary Dot
2	Not Connected
3	Secondary
4	Primary
5	Primary Dot

Electrical Specifications: Freq. = 4.5 - 3000 MHz, $T_A = 25^\circ\text{C}$, $Z_0 = 50 \Omega$, $P_{IN} = 0 \text{ dBm}$

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Insertion Loss	4.5 - 1000 1000 - 2000 2000 - 3000	dB	—	0.32 — —	1.0 2.0 3.5
Amplitude Unbalance	—	dB	—	0.5	1.0
Phase Unbalance	—	°	—	5	20

Ordering Information

Parameter	Package
MABA-009822-715254	2000 piece reel

Absolute Maximum Ratings

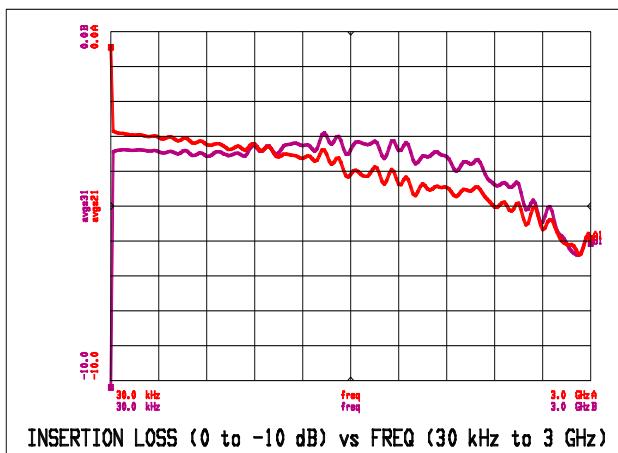
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	50 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

1:1 Transmission Line Transformer 4.5 - 3000 MHz

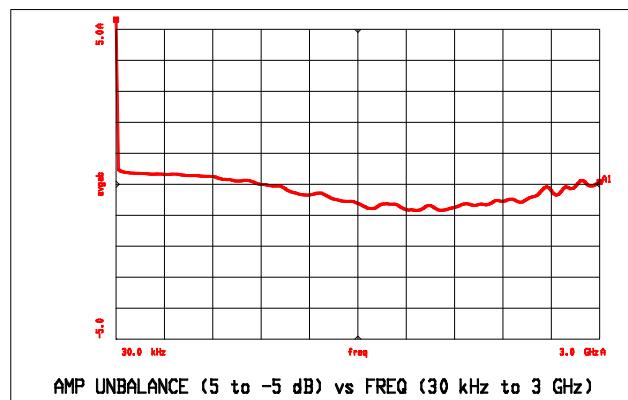
Rev. V2

Typical Performance: $T_A = 25^\circ\text{C}$, $Z_0 = 50 \Omega$, $P_{\text{IN}} = 0 \text{ dBm}$

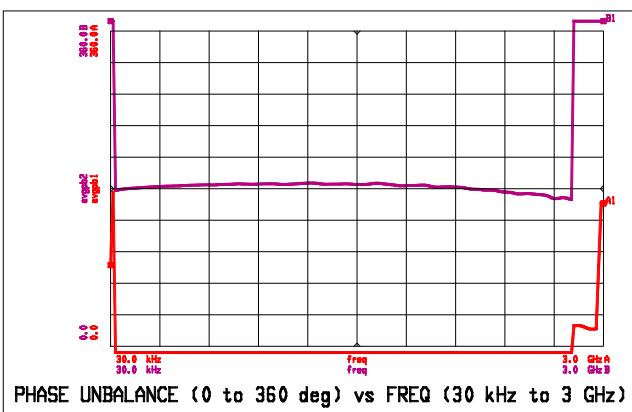
Insertion Loss



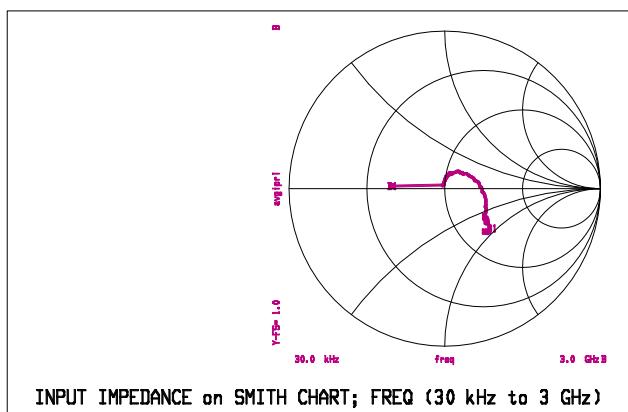
Amplitude Unbalance



Phase Unbalance

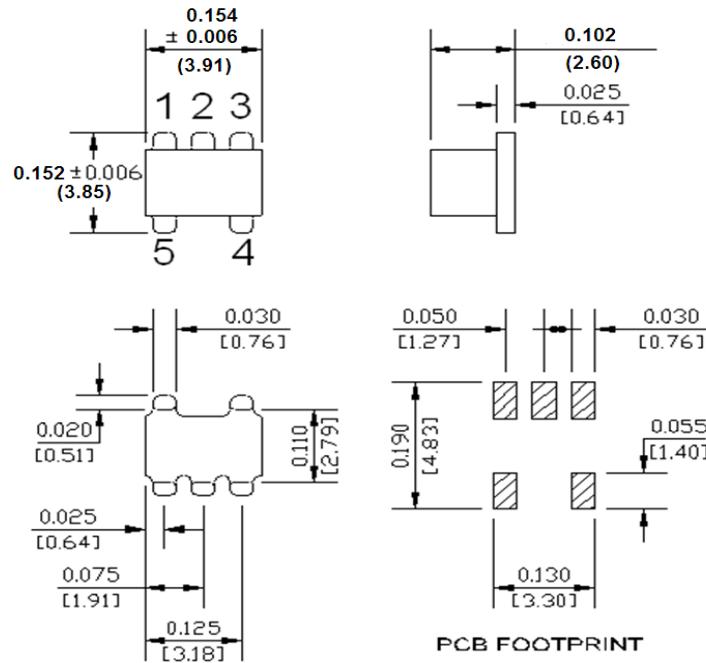


Input Impedance

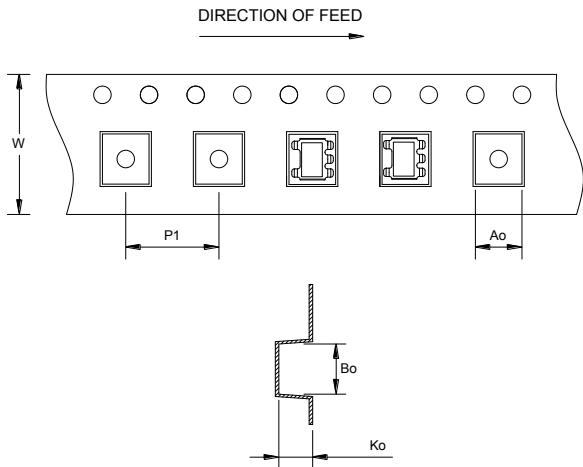


1:1 Transmission Line Transformer
4.5 - 3000 MHz

Rev. V2

Case Style SM-22

Dimensions are inches (millimeters) ± 0.015 (0.38) unless otherwise specified.
 Drawing not to scale.

Tape & Reel Information**Dimensions**

Item	Dimension (mm)
A_0	4.00 ± 0.1
B_0	4.30 ± 0.1
K_0	2.90 ± 0.1
W	12.00 ± 0.3
$P1$	8.00 ± 0.1

1:1 Transmission Line Transformer 4.5 - 3000 MHz

Rev. V2

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