

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

Rev. V3

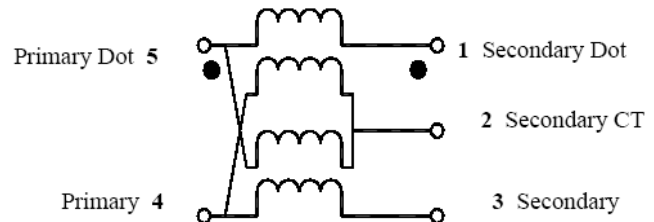
### Features

- Surface Mount Package
- Wide Frequency Range
- 1:4 Impedance
- CT on Secondary
- Lead Free
- RoHS\* Compliant and 260°C reflow compatible

### Description

The MABA-007569-ETK42T is a RoHS compliant 1:4 RF transmission line transformer in a surface mount package. The windings of this device are welded to the package substrate for improved reliability and to eliminate lead content. Ideally suited for high volume cellular and wireless application.

### Schematic



### Pin Configuration

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

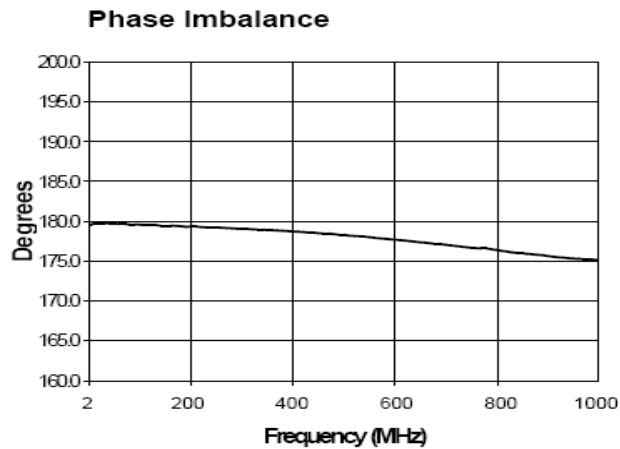
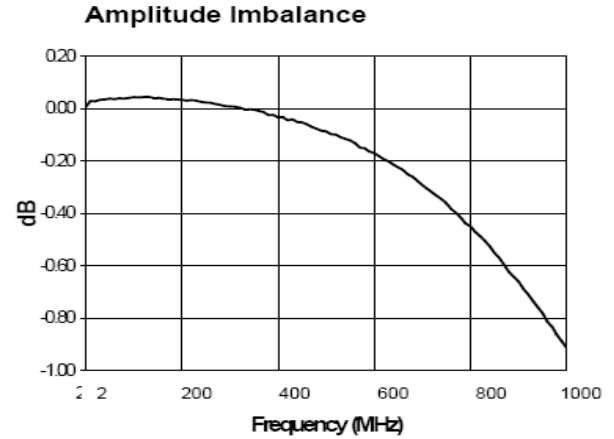
### Electrical Specifications: Freq. = 2 - 1000 MHz, T<sub>A</sub> = 25°C, Z<sub>0</sub> = 50 Ω

Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss	5.0 - 250 MHz	dB	—	0.32	1.0
	3.0 - 500 MHz				2.0
	2.5 - 700 MHz				3.0
	2.0 - 1000 MHz				4.0
Amplitude Unbalance	2.0 - 300 MHz	dB	—	—	0.3
	300 - 1000 MHz				2.0
Phase Unbalance	2.0 - 300 MHz	Degrees	—	—	5
	300 - 1000 MHz				20

### Electrical Specifications: Freq. = 2 - 1000 MHz, T<sub>A</sub> = 25°C, Z<sub>0</sub> = 75 Ω

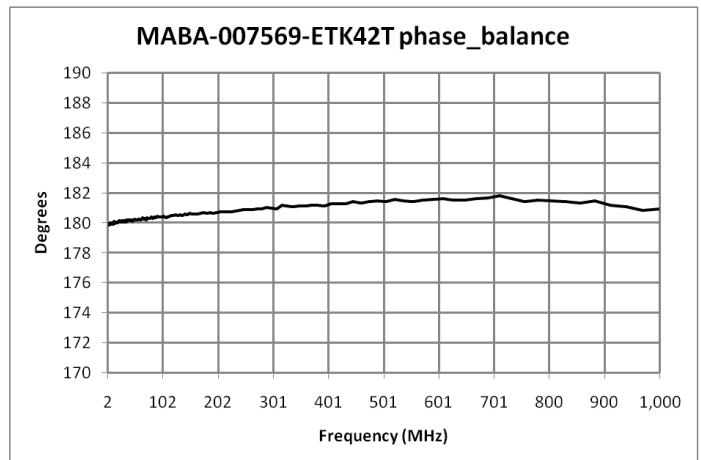
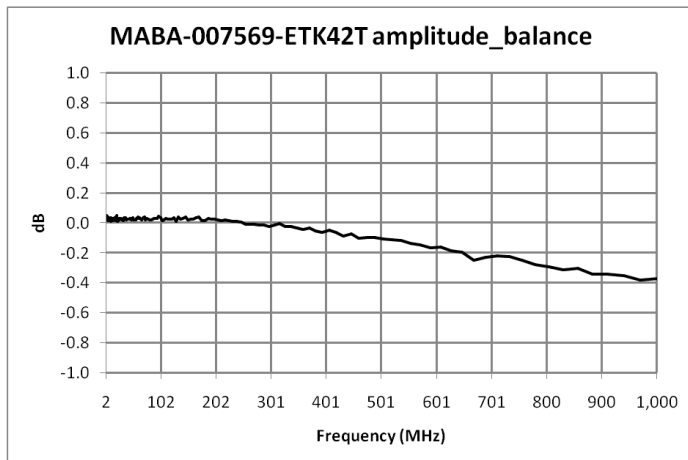
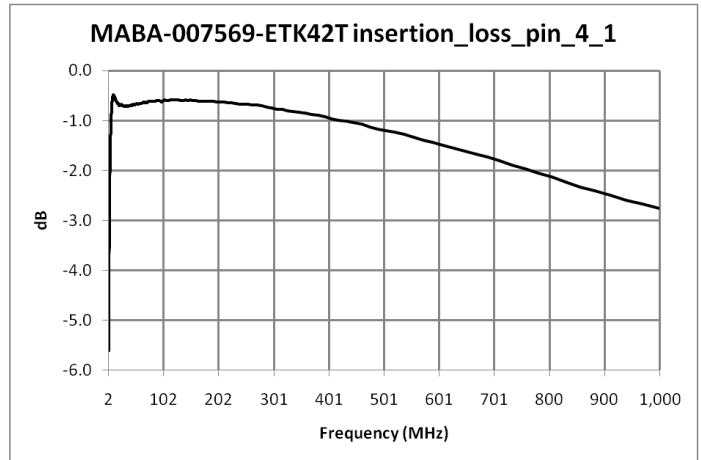
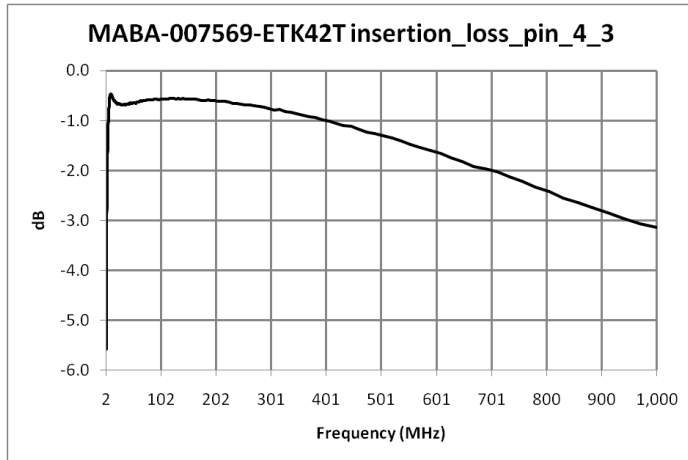
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss	8.0 - 250 MHz	dB	—	—	1.0
	5.0 - 500 MHz				2.0
	4.0 - 700 MHz				3.0
	700 - 1000 MHz				4.5
Amplitude Unbalance	2.0 - 300 MHz	dB	—	—	0.3
	300 - 1000 MHz				2.0
Phase Unbalance	2.0 - 300 MHz	Degrees	—	—	5
	300 - 1000 MHz				20

Typical Performance Curves: Freq. = 2 - 1000 MHz,  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50 \Omega$



Temperature data available on request

Typical Performance Curves: Freq. = 2 - 1000 MHz,  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75 \Omega$



Temperature data available on request

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

Rev. V3

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

Parameter	Rating
Input Power	250 mW
DC Current	30 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

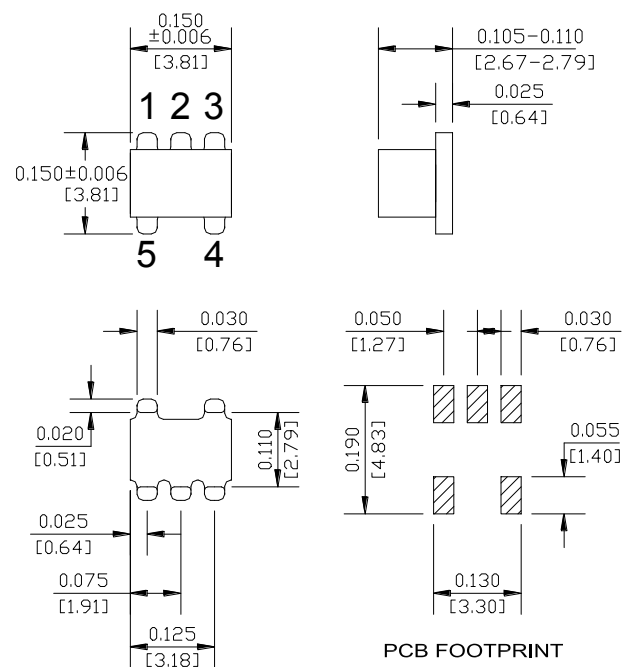
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. MACOM does not recommend sustained operation near these survivability limits.

### Ordering Information<sup>3</sup>

Part Number	Package
MABA-007569-ETK4-2T	2000 piece reel

3. Reference Application Note M513 for reel size information.

### SM-22 package



### 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	4.0
B <sub>0</sub>	mm	4.3
K <sub>0</sub>	mm	2.9
Orientation	-	F5
Reference Application note ANI-019 for orientation		

MACOM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with MACOM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Audio Transformers](#) / [Signal Transformers](#) category:*

*Click to view products by [MACOM](#) manufacturer:*

Other Similar products are found below :

[CX2041NLT](#) [MGPWT-00449-P](#) [PE-64961](#) [H1302FNLT](#) [H5008FNL](#) [H5012FNL](#) [H5020FNLT](#) [H5077NLT](#) [H5084FNLT](#)  
[B78476A9558A003](#) [1812WBT2-4](#) [1879479-1](#) [HX2260FNL](#) [HX5014FNL](#) [EX2024FNL](#) [FL1066](#) [T1137NLT](#) [T3012NL](#) [PE-65812FNL](#) [PE-65848FNLT](#) [H1174FNL](#) [H1302FNL](#) [H5015FNL](#) [H5019EFNL](#) [H5062FNLT](#) [CX2047LNL](#) [MGPWT-00059-P](#) [MGPWT-00266-P](#) [MGPWT-00278-P](#) [MGPWT-00431-P](#) [TTC-100](#) [TTC-143-H](#) [TTC-5032-1](#) [BX1194WNLT](#) [HX1234NLT](#) [HX5008FNLT](#) [HX5019FNL](#) [HX5084NL](#) [3-1879385-5](#) [TX1263NLT](#) [4-1879391-0](#) [T1142NL](#) [HX6101FNL](#) [HX5084FNL](#) [HX1148NL](#) [HX5020FNLT](#) [HX5014FNLT](#) [T1124NL](#)  
[1879732-1](#) [2-1879391-5](#)