

Electronics

RF 1:4 Transmission Line Step-up Transformer 2 — 1000 MHz

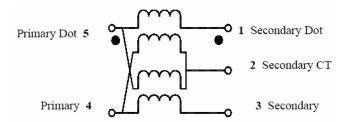
## Features

- Surface mount
- Wide frequency range
- 1:4 impedance
- CT on Secondary
- Lead Free
- RoHS\* Compliant and is 260°C reflow compatible.
- Available on Tape and Reel, reel quantity 2000

# Description

M/A-COM's MABA-007569-ETK42T is a RoHS compliant 1:4 RF transmission line transformer in a low cost, surface mount package. The windings of the MABA-007569-ETK4-2T 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.

# Schematic



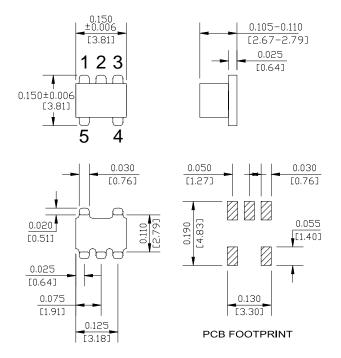
# Pin Configuration

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

# SM-22 package

**RoHS** 

Compliant



# **Ordering Information**

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

Note: Reference Application Note M513 for reel size information.

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

Parameter	Absolute Maximum		
DC 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.

 M/A-COM does not recommend sustained operation near these survivability limits.

This PRELIMINARY Data Sheet contains information regarding a product M/A-COM has under development. Performance is based on measured results and target specifications. Commitment to produce in volume is not guaranteed.

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

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Visit www.macom.com for additional data sheets and product information.



# MABA-007569-ETK42T V1 P

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# RoHS Compliant



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

MABA-007569-ETK42T V1 P

# Electrical Specifications: $T_A = 25^{\circ}C$ , $Z_0 = 50\Omega^{-1}$

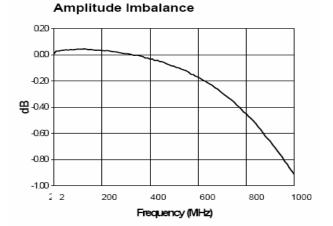
Parameter	Test Conditions	Test Conditions	Units	Min	Тур	Max
RF Frequency	-	2.0 - 1000	MHz	-	-	-
Insertion Loss	-	5.0 - 250 3.0 - 500 2.5 - 700 2.0 - 1000	dB dB dB dB	- - -	0.32 - -	1.0 2.0 3.0 4.0
Amplitude Unbalance	-	2.0 - 300 300 - 1000	dB	-	-	0.3 2.0
Phase Unbalance	-	2.0 - 300 300 - 1000	Degrees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

### **Typical Performance Curves**

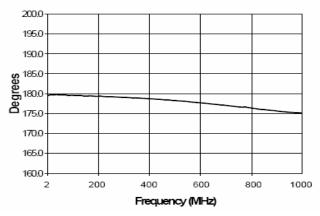
#### Insertion Loss



Amplitude Unbalance



### Phase Unbalance



Phase Imbalance

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