

# RoHS Compliant



Step-up Transformer MABA-007236-C16423

# E-Series RF 1:4 Transmission Line Step-up Transformer 500 — 2500 MHz

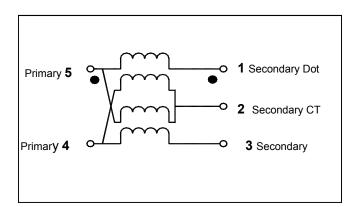
#### **Features**

- Surface mount
- · Wide frequency range
- 1:4 Impedance Ratio
- 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-007236-C16423 is a RoHS compliant 1:4 RF transmission line step-up transformer in a low cost, surface mount package. Ideally suited for high volume cellular and wireless applications. Typical applications include single to balanced mode conversion and impedance matching. Parts are packaged in tape & reel.

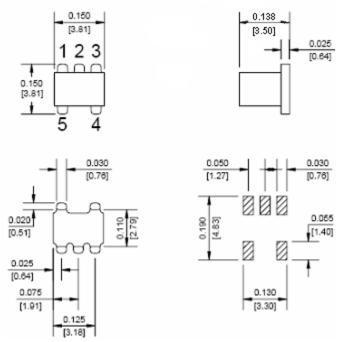
### **Schematic**



# **Pin Configuration**

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

# SM-22 package



DIMENSIONS ARE IN INCHES (TOP) AND MILLIMETERS (BOTTOM)
TOLERANCES (UNLESS SPECIFIED OTHERWISE)

INCHES	MILLIMETERS
$X = \pm 0.04$	$X = \pm 1.00$
$.XX = \pm 0.02$	$.XX = \pm 0.50$
$XXX = \pm 0.01$	$XXX = \pm 0.25$

# **Ordering Information**

Part Number	Package
MABA-007236-C16423	2000 piece reel

Note: Reference Application Note M513 for reel size information.

# Absolute Maximum Ratings 1,2

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

- North America Tel: 800.366.2266 / Fax: 978.366.2266
- Europe Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- Asia/Pacific Tel: 81.44.844.8296 / Fax: 81.44.844.8298

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

M/A-COM Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. M/A-COM makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does M/A-COM assume any liability whatsoever arising out of the use or application of any product(s) or information.



# RoHS Compliant



E-Series RF 1:4 Transmission Line Step-up Transformer 500 — 2500 MHz

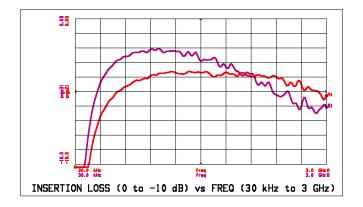
MABA-007236-C16423

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

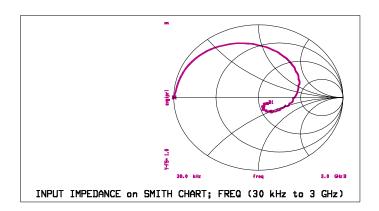
Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
RF Frequency	_	500 - 2500	MHz	_	_	_
Insertion Loss	F <sub>L</sub> —f <sub>U</sub>	500 - 750 750 - 1200 1200 - 2500	dB dB dB			3.0 1.0 3.0

# **Typical Performance Curves**

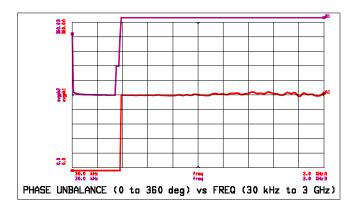
#### Insertion Loss



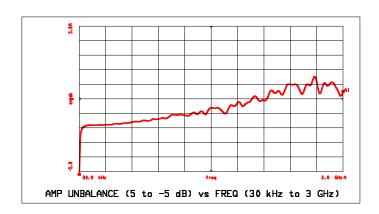
### Input Impedance



#### Phase Unbalance



### Amplitude Unbalance



<sup>2</sup> 

<sup>•</sup> North America Tel: 800.366.2266 / Fax: 978.366.2266

<sup>•</sup> Europe Tel: 44.1908.574.200 / Fax: 44.1908.574.300

Asia/Pacific Tel: 81.44.844.8296 / Fax: 81.44.844.8298