

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

**MABA-007236-C16423  
V2**

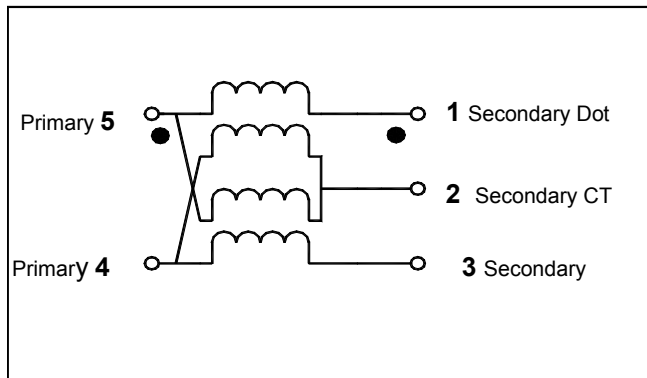
**Features**

- 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.

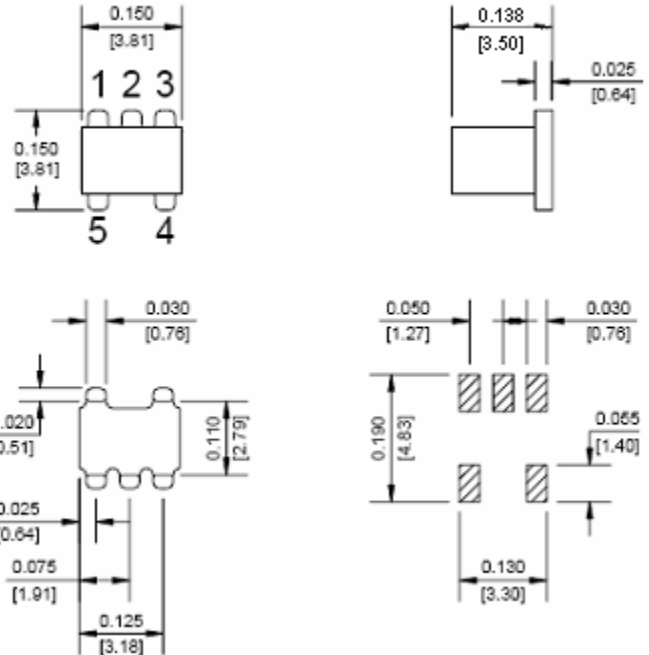
**Schematic**



**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 = ±0.04	.X = ±1.00
.XX = ±0.02	.XX = ±0.50
.XXX = ±0.01	.XXX = ±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 <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.
2. M/A-COM does not recommend sustained operation near these survivability limits.

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

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

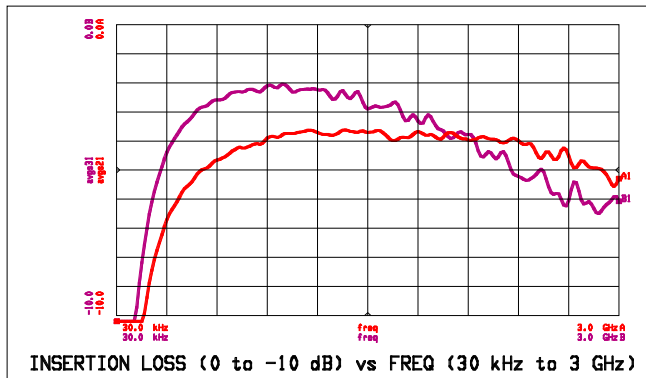
**MABA-007236-C16423  
V2**

**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$  <sup>1</sup>**

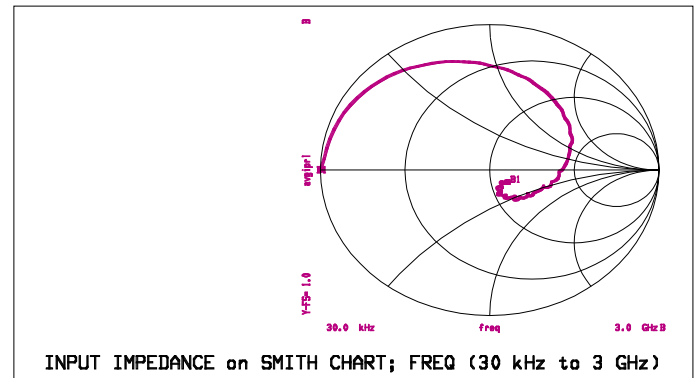
Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	500 - 2500	MHz	—	—	—
Insertion Loss	$F_L - f_U$	500 - 750	dB	—	—	3.0
		750 - 1200	dB	—	—	1.0
		1200 - 2500	dB	—	—	3.0

**Typical Performance Curves**

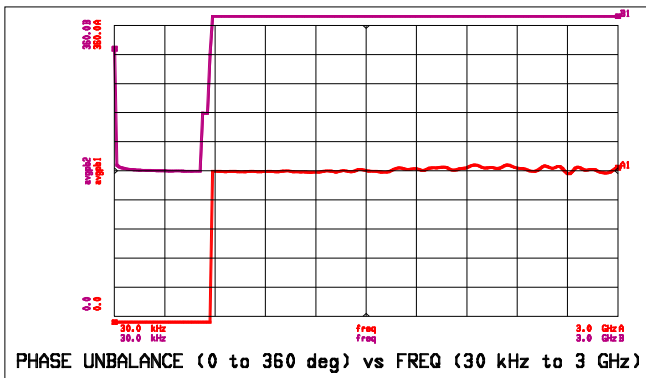
*Insertion Loss*



*Input Impedance*



*Phase Unbalance*



*Amplitude Unbalance*

