

Rev. V7

## E-Series RF 1:4 Transmission Line Step-up Transformer 500 — 3000 MHz

#### **Features**

- Surface mount
- Wide frequency range
- 1:4 Impedance Ratio
- CT on Secondary
- Pb Free
- RoHS\* version of ETC1.6-4-2-3
- 260<sup>°</sup>C reflow compatible.

### Description

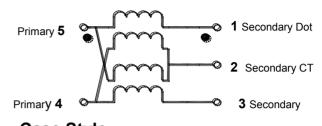
M/A-COM Technology Solutions MABA-007236-C16423 is a RoHS compliant 1:4 RF transmission line step-up transformer in a low cost, surface mount package. Ideally suited for high volume cellular and wireless applications. Typical applications include single to balanced mode conversion and impedance matching. Parts are packaged in tape & reel.



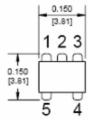
### **Pin Configuration**

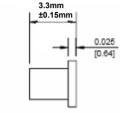
Pin No.	Function	
1	Secondary Dot	
2	Secondary CT	
3	Secondary	
4	Primary	
5	Primary Dot	

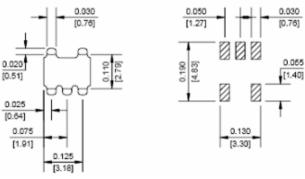
#### Schematic



### Case Style







Dimensions in inches [mm] Tolerance: .xx  $\pm$  .02, .xxx  $\pm$  .010, unless otherwise stated

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

Parameter	Value		
DC Power	250 mW		
DC Current	50 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 Technology Solutions does not recommend sustained operation near these survivability limits.

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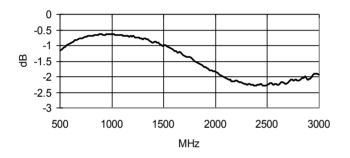
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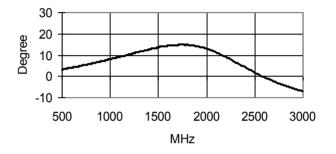
### Electrical Specifications: $T_A = 25^{\circ}C$ , $Z_0 = 50\Omega^{-1}$

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
RF Frequency		500 - 3000	MHz			
Insertion Loss	F∟—f∪	500 - 700 700 - 1200 1200 - 3000	dB dB dB			2.0 1.0 3.0

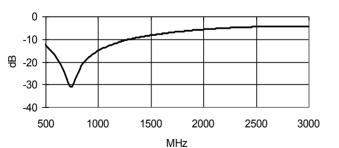
#### Insertion Loss



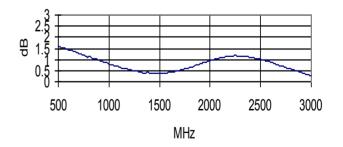
Phase Unbalance



Input Return Loss



Amplitude Unbalance



2

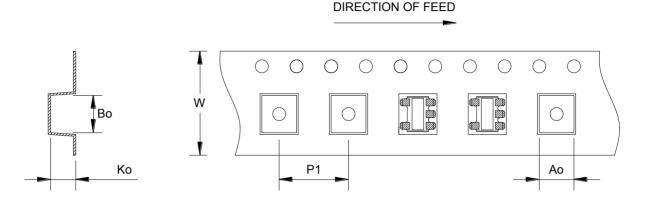
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#### Tape & Reel Information



ltem	Dimension	
Ao	4.10mm +/- 0.1mm	
Во	4.20mm +/- 0.1mm	
Ko	3.40mm +/- 0.1mm	
W	12.00mm +/- 0.3mm	
P1	8.00mm +/- 0.1mm	

#### **Ordering Information**

Part number	Description		
MABA-007236-C16423	2000 piece reel		

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