# MABA-007236-C16423



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

Rev. V6

### **Features**

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

### **Description**

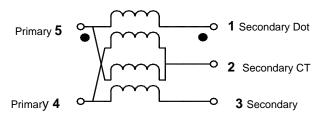
M/A-COM Technology Solutions MABA-007236-C16423 is a RoHS compliant 1:4 RF transmission line step-up transformer in a low cost, surface mount package. Ideally suited for high volume cellular and wireless applications. Typical applications include single to balanced mode conversion and impedance matching.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



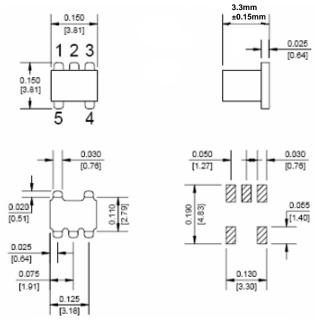
# **Pin Configuration**

| 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 ± .02, .xxx ± .010, unless otherwise stated

# Recommended Maximum Ratings 1,2

| 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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- North America Tel: 800.366.2266 Europe Tel: +353.21.244.6400
- India Tel: +91.80.43537383
- China Tel: +86.21.2407.1588

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

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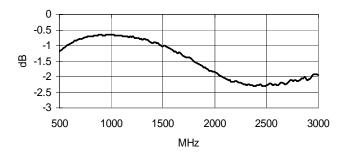
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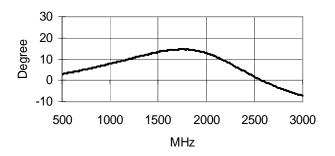
# Electrical Specifications: $T_A = 25^{\circ}C$ , $Z_0 = 50\Omega^{1}$

| Parameter      | Test Conditions                | Frequency                              | Units          | Min         | Тур | Max               |
|----------------|--------------------------------|--|----------------|-------------|-----|-------------------|
| RF Frequency   | _                              | 500 - 3000                             | MHz            | _           |     | _                 |
| Insertion Loss | F <sub>L</sub> —f <sub>U</sub> | 500 - 700<br>700 - 1200<br>1200 - 3000 | dB<br>dB<br>dB | _<br>_<br>_ |     | 2.0<br>1.0<br>3.0 |

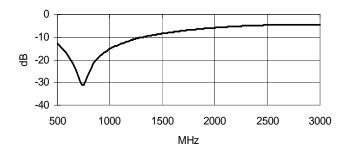
#### **Insertion Loss**



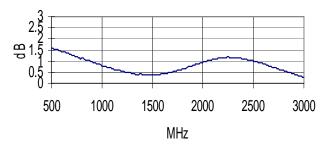
#### Phase Unbalance



#### Input Return Loss



#### Amplitude Unbalance



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<sup>2</sup> 

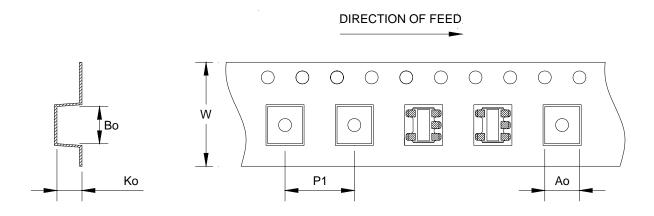
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### **Tape & Reel Information**



| Item | 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**

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| Part number        | Description     |
|--------------------|-----------------|
| MABA-007236-C16423 | 2000 piece reel |
|                    |                 |

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