# **MABAES0032**

Transformer, 1:1 Transmission Line Transformer 5 to 1000 MHz



M/A-COM Products Rev. V3

#### Features

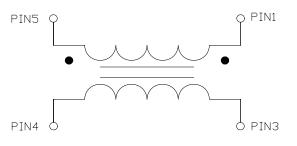
- Surface mount
- 1:1 Impedance ratio
- 260°C reflow compatible
- RoHS\* compliant and lead free
- Available on tape and reel

### Description

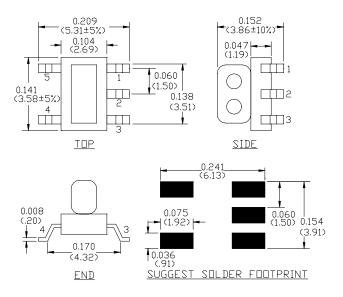
M/A Com's MABAES0032 is a 1:1 RF Transmission Line transformer in a low cost, surface mount package. Ideally suited for broadband CATV applications. Typical applications include single to balances mode conversion and impedance matching.



# Schematic



### Case style: SM-138



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

# **Ordering Information**

Part number	Description		
MABAES0032	2000 piece reel		

#### Din no

**Pin Configuration** 

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FILLIO.	runction		
1	Secondary dot		
2	Not used (Ground)		
3	Secondary		
4	Primary		
5	Primary Dot		

Eunction

Note: Reference Application Note M513 for reel size information.

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

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

PRELIMINARY: Data Sheets contain information regarding a product MA-COM Technical Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commit- MA-COM Technical Solutions and its affiliates reserve the right to make changes to the ment to produce in volume is not guaranteed

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# **MABAES0032**

Transformer, 1:1 Transmission Line Transformer 5 to 1000 MHz



**M/A-COM Products** Rev. V3

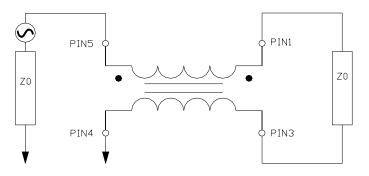
## Electrical Specifications: $T_A = 25^{\circ}C$ , 0dBm, $Z_0 = 50\Omega$ , $P_{in} = 0dBm$

Parameter	Frequency	Units	Min	Тур	Max
Insertion Loss	5 - 300 MHz 300 - 1000 MHz	dB dB	-	0.7 1.3	1.0 1.8
Amplitude Unbalance (Nominal 0dB)	5 - 1000 MHz	dB	-	0.4	±0.8
Phase Unbalance (Nominal 180°)	5 - 300 MHz 300 - 1000 MHz	0 0	-	3.0 7.0	±5.0 ±10.0

## **Recommended Maximum Ratings**

Parameter	Value
Input power	At least +24dBm (250mW)
DC current	At least 30mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C

# **Application Circuit**



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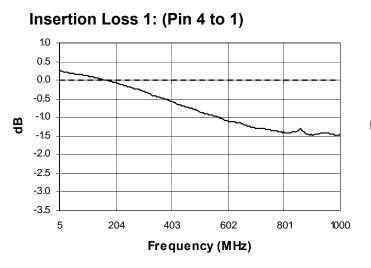
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WWW COM

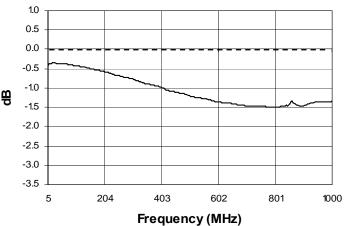
# **MABAES0032**



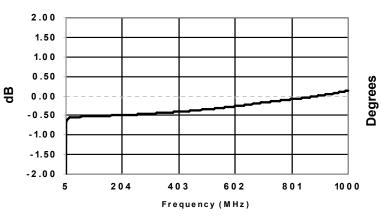
## Typical Performance Curves: $T_A = 25^{\circ}C$ , 0dBm, $Z_0 = 50\Omega$ , $P_{in} = 0$ dBm



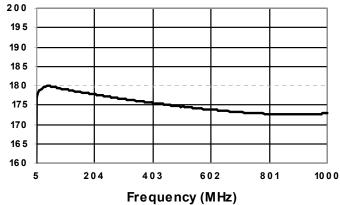
Insertion Loss 2: (Pin 4 to 3)



### **Amplitude Balance**



### Phase Balance



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