

# RoHS Compliant



MABA-007159-000000 V3P

# RF 1:1 Transmission Line Transformer 4.5 — 3000 MHz

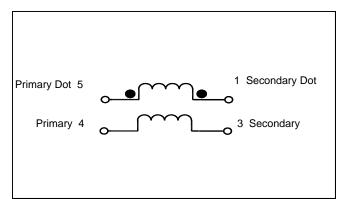
### **Features**

- Surface mount
- · Wide frequency range
- 1:1 impedance
- Lead Free
- RoHS equivalent to the ETC1-1-13 transformer
- RoHS\* Compliant and is 260°C reflow compatible.
- Available on Tape and Reel, reel quantity 2000

## **Description**

M/A-COM's MABA-007159-000000 is a RoHS compliant 1:1 RF transmission line transformer in a low cost, surface mount package. The windings of the MABA-007159-000000 are welded to the package substrate for improved reliability and to eliminate lead content. Ideally suited for high volume cellular and wireless application. Parts are packaged in tape & reel.

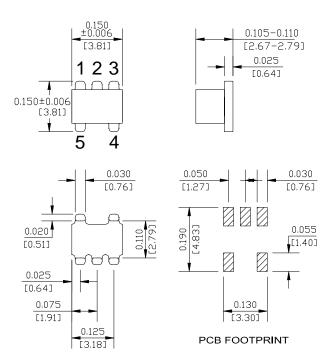
### **Schematic**



## **Pin Configuration**

Pin No.	Function			
1	Secondary Dot			
2	Not Connected			
3	Secondary			
4	Primary			
5	Primary Dot			

### SM-22 package



## **Ordering Information**

Part Number	Package		
MABA-007159-000000	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.
- M/A-COM does not recommend sustained operation near these survivability limits.

This PRELIMINARY Data Sheet contains information regarding a product M/A-COM has under development. Performance is based on measured results and target specifications. Commitment to produce in volume is not guaranteed.

\* 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

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



MABA-007159-000000

# RF 1:1 Transmission Line Transformer 4.5 — 3000 MHz

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

Parameter	Test Conditions	Test Conditions	Units	Min	Тур	Max
RF Frequency	-	4.5 - 3000	MHz	-	-	-
Insertion Loss	-	4.5 - 1000 1000 - 2000 2000 - 3000	dB dB dB	- - -	0.32 - -	1.0 2.0 3.5
Amplitude Unbalance	-	4.5 - 1000	dB	-	-	1.0
Phase Unbalance	-	4.5 - 1000	Degrees	-	-	20

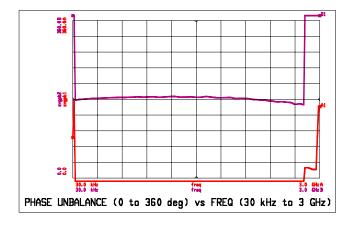
## **Typical Performance Curves**

#### **Insertion Loss**

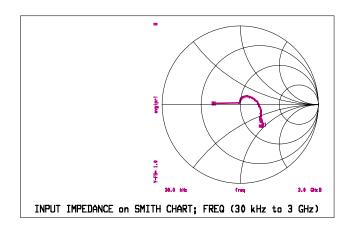


### Phase Unbalance

information.



### Input Impedance



### Amplitude Unbalance



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

<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