

Electronics

RF 1:1 Transmission Line Transformer 4.5 — 3000 MHz

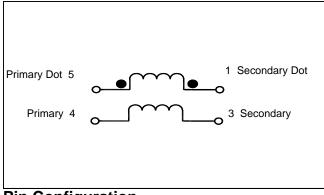
Features

- 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



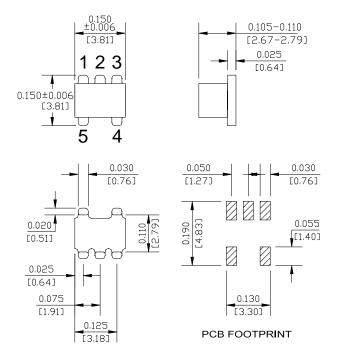
Pin Configuration

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

SM-22 package

RoHS

Compliant



Ordering Information

Part Number	Package	
MABA-007159-000000	2000 piece reel	

Note: Reference Application Note M513 for reel size information.

Absolute Maximum Ratings ^{1,2}

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.

1

- 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.



MABA-007159-000000

V3P

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RoHS Compliant



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MABA-007159-000000 V3P

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

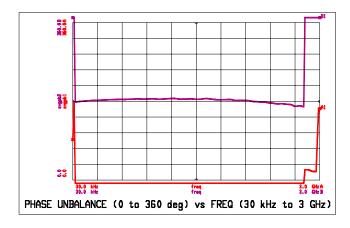
Parameter	Test Conditions	Test Conditions	Units	Min	Тур	Max
RF Frequency	-	4.5 - 3000	MHz	-	-	-
Insertion Loss	-	4.5 - 1000 1000 - 2000 2000 - 3000	dB dB dB		0.32 - -	1.0 2.0 3.5
Amplitude Unbalance	-	4.5 - 1000	dB	-	-	1.0
Phase Unbalance	-	4.5 - 1000	Degrees	-	-	20

Typical Performance Curves

Insertion Loss



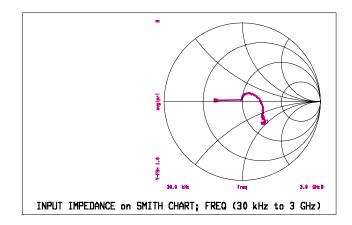
Phase Unbalance



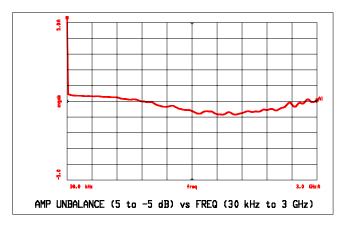
2

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Input Impedance



Amplitude Unbalance



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