

# RoHS Compliant



MABA-007327-CT1A40 V1P

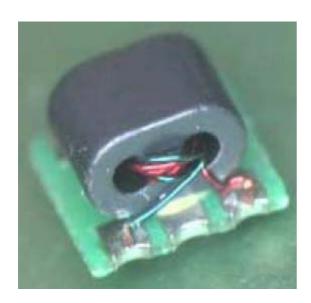
1:1 Tx Line Balun Transformer 4.5-3000MHz

## **Features**

- Surface Mount
- 1:1 Impedance
- 260°C Reflow Compatible
- RoHS\* Compliant
- RoHS version of MABACT0034.
- Available on Tape and Reel. Reel quantity 2000

## **Description**

M/A-COM's MABA-007327-CT1A40 is a 1:1 Tx Balun transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.

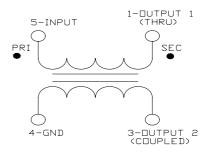


### **Pin Configuration**

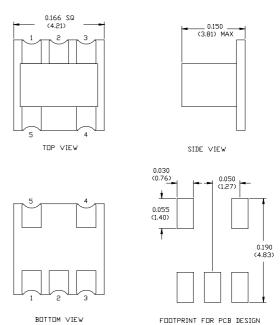
Pin No.	Function		
1	Secondary (output 1)		
2	Not Connected (Ground)		
3	Secondary Dot (output 2)		
4	Primary (Ground)		
5	Primary Dot (Input)		

Note: Reference Application Note M513 for reel size information.

#### **Schematic**



## Case Style: SM-164



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

## **Ordering Information**

Part Number	Package		
MABA-007327-CT1A40TR	2000 piece reel		
MABA-007327-CT1ATB	Customer Test Board		

- \* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.
  - M/A-COM Inc. and its affiliates reserve the right to make changes to the

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MABA-007327-CT1A40

1:1 Tx Line Balun Transformer 4.5-3000MHz

Electrical Specifications:  $T_A = 25$ °C,  $Z_0 = 75\Omega$ 

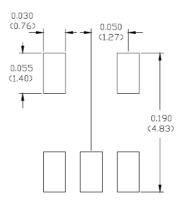
Parameter	Test Conditions	Units	Min	Тур	Max
Insertion Loss	4.5 - 1000 MHz 1000 - 2000 MHz 2000 - 3000 MHz	dB dB dB	- - -	0.8 1.6 2.5	1.0 2.0 3.5
Amplitude Unbalance	4.5 - 3000 MHz	dB	-	±0.5	±1.0
Phase Unbalance	4.5 - 3000 MHz	0	-	±10	±20

# **Absolute Maximum Ratings** <sup>1,2</sup>

Parameter	Absolute Maximum		
RF Power	250mW		
DC current	30mA		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-40°C to +85°C		

- 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.

# **Recommended PCB Configuration**



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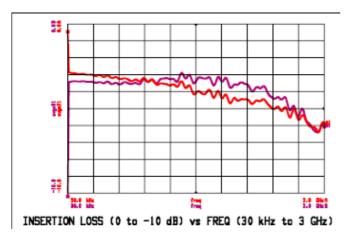
MABA-007327-CT1A40

1:1 Tx Line Balun Transformer

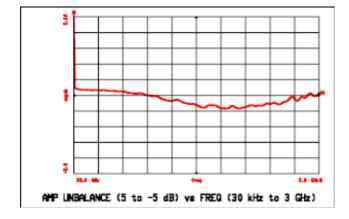
4.5-3000MHz

## Typical Performance Curves: $T_A = 25^{\circ}C$ , $Z_0 = 75\Omega$

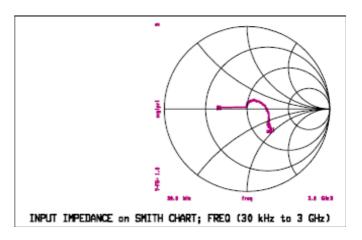
### **Insertion Loss**



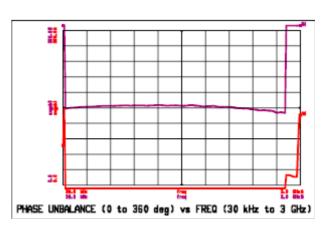
## **Amplitude Unbalance**



### **Input Return Loss**



#### **Phase Balance**



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