

**1:1 Tx Line Balun Transformer  
4.5-3000MHz**

**MABA-007327-CT1A40  
V1P**

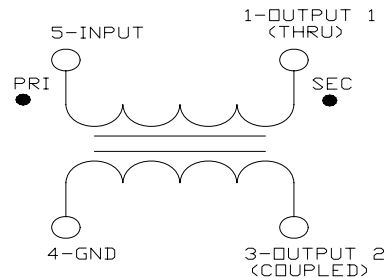
**Features**

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

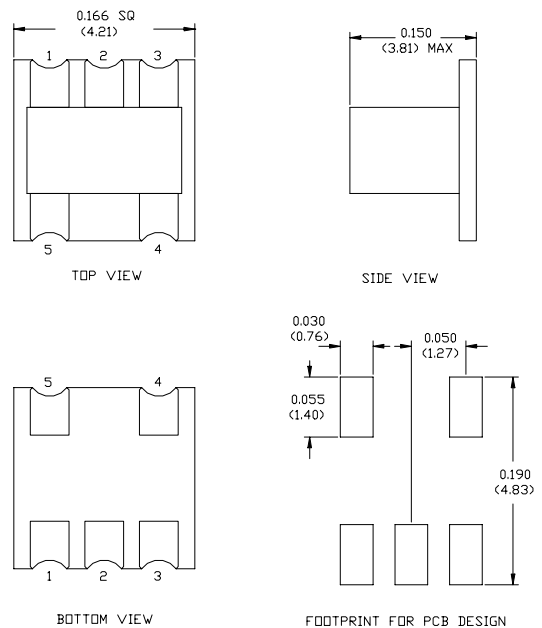
**Description**

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.

**Schematic**



**Case Style: SM-164**



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

**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.

**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.

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**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$**

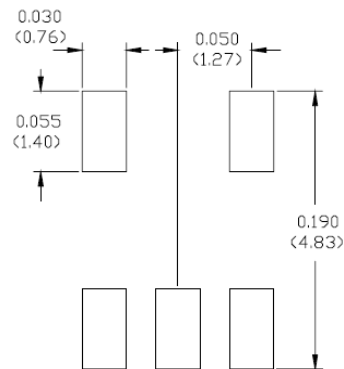
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss	4.5 - 1000 MHz	dB	-	0.8	1.0
	1000 - 2000 MHz	dB	-	1.6	2.0
	2000 - 3000 MHz	dB	-	2.5	3.5
Amplitude Unbalance	4.5 - 3000 MHz	dB	-	$\pm 0.5$	$\pm 1.0$
Phase Unbalance	4.5 - 3000 MHz	$^\circ$	-	$\pm 10$	$\pm 20$

**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**

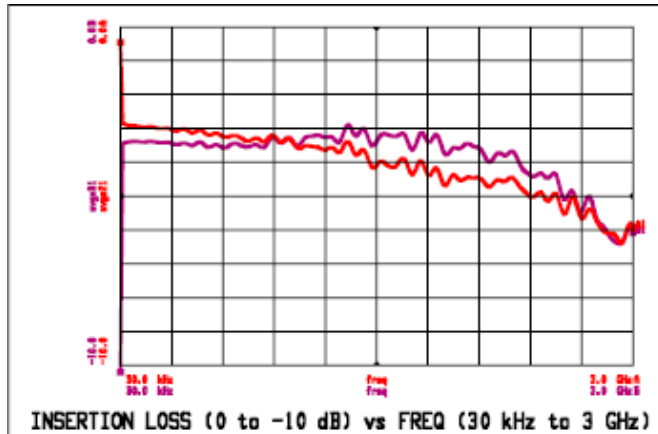


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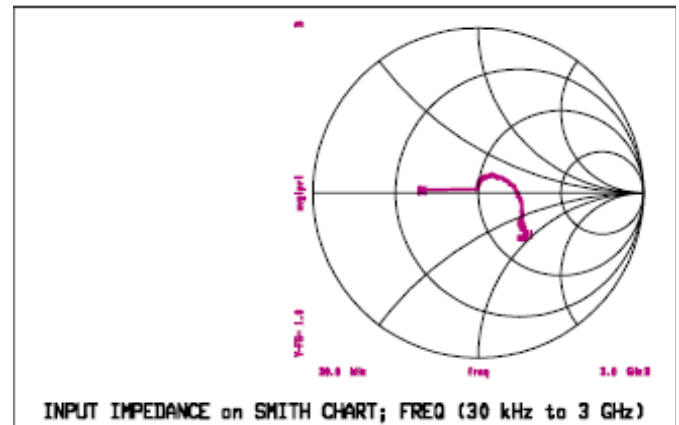
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Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$

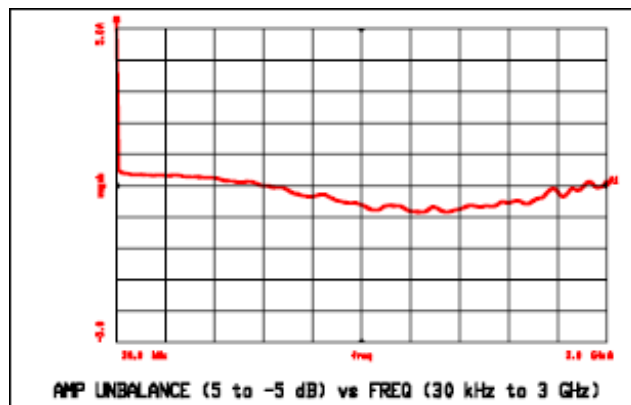
**Insertion Loss**



**Input Return Loss**



**Amplitude Unbalance**



**Phase Balance**

