

MABA-007327-CT1A40

1:1 Tx Line Balun Transformer
4.5 - 3000 MHz

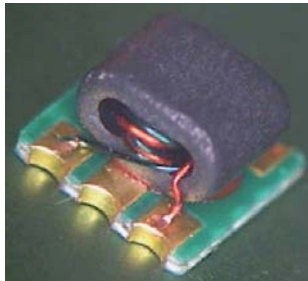
M/A-COM Products
Part Status: Released Rev. V1

Features

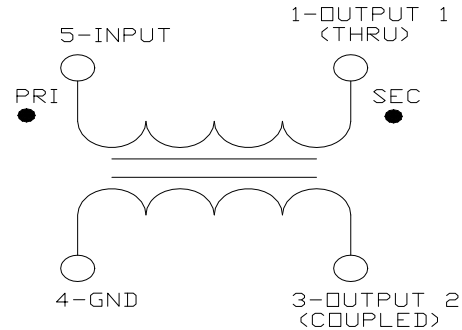
- Surface Mount
- 1:1 Impedance
- 260°C Reflow Compatible
- RoHS Compliant
- Available on Tape and Reel

Description

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



Schematic



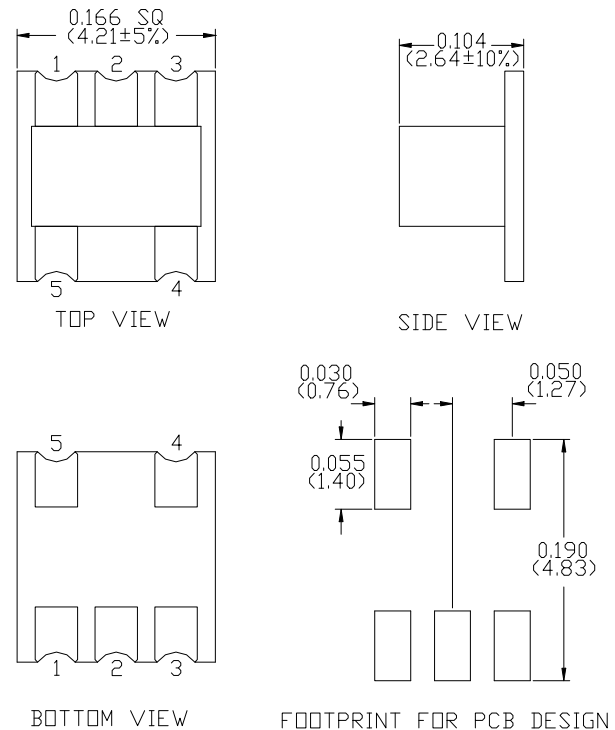
Pin Configuration

Function	Pin Number
Secondary Dot (output 1)	1
Not Connected (ground)	2
Secondary (output 2)	3
Primary (Ground)	4
Primary Dot (Input)	5

Ordering Information

Parameter	Package
MABA-007327-CT1A40	2000
MABA-007327-CT1ATB	Customer Test Board

Case Style SM-164



Dimensions are inches (millimetres) ±0.015 (0.38) unless otherwise specified.

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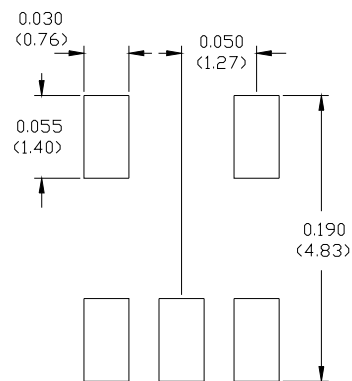
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range	4.5 – 3000 MHz				
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 Balance	4.5 – 3000 MHz	dB	–	0.5	± 1.0
Phase Balance	4.5 – 3000 MHz	$^\circ$	–	10	± 20

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Power	250mW
DC Current	30mA
Operating Temperature	-40°C to $+85^\circ\text{C}$
Storage Temperature	-40°C to $+85^\circ\text{C}$

Recommended PCB Configuration



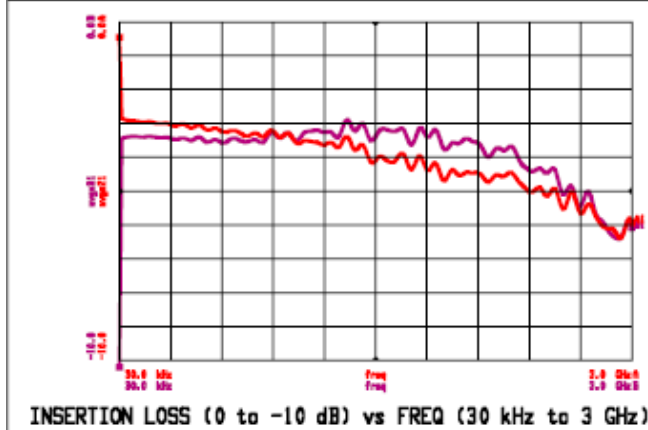
FOOTPRINT FOR PCB DESIGN

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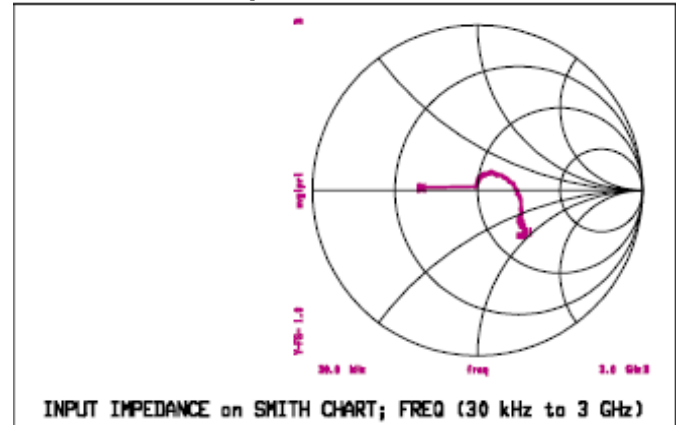
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Typical Performance: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

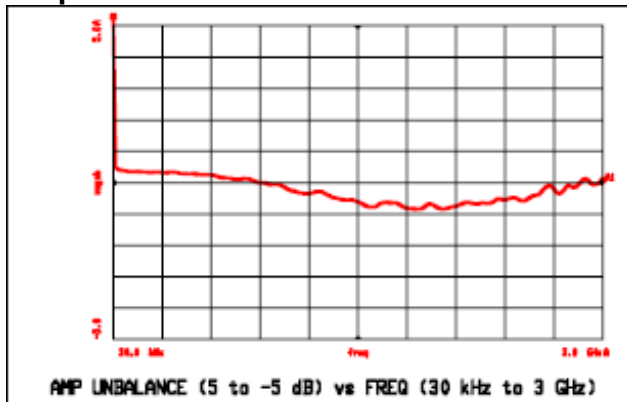
Insertion Loss 1 (Pin4 - Pin1)



Return Loss: Input



Amplitude Balance



Phase Balance

