

2:1 Flux Coupled Balun Transformer

5 - 100 MHz

Rev. V2

Features

- · 2:1 Impedance
- Surface Mount Package
- 75 Ω Single Ended to 37.5 Ω Balance
- RoHS Compliant, Lead Free
- Available on Tape and Reel

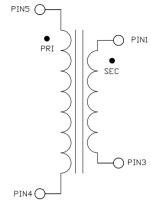
Description

The MABA-009776-CF28A0 is a 2:1 RF flux coupled step-down balun transformer with out a center tap, in a surface mount package.

Ideally suited for high volume CATV/Broadband applications.

Schematic





Pin Configuration

Pin #	Function		
1	Secondary Dot		
2	No Connection		
3	Secondary		
4	Primary		
5	Primary Dot		

Electrical Specifications: Freq. = 5 - 100 MHz, $T_A = 25^{\circ}$ C, $Z_0 = 75 \Omega$, $P_{IN} = 0 \text{ dBm}$

Parameter	Test Conditions	Units	Min.	Тур.	Max.
Insertion Loss 1 (Pin 5 to Pin 1)	5 - 100 MHz	dB	_	0.4	0.8
Insertion Loss 2 (Pin 5 to Pin 3)	5 - 100 MHz	dB	_	0.4	0.8
Amplitude Balance	5 - 100 MHz	dB	_	0.1	±1.0
Phase Balance	5 - 100 MHz	0	_	2.0	±6.0
Input Return Loss (Pin 4)	5 - 100 MHz	dB	14	22	_

Ordering Information

Part #	Package
MABA-009776-CF28A0	2000
MABA-009776-CF28TB	Customer Test Board

Recommended Maximum Ratings

Parameter	Value		
RF Power	er 27 dBm (500 mW)		
DC Current	300 mA		
Operating Temperature	-40°C to +100°C		
Storage Temperature	-55°C to +115°C		

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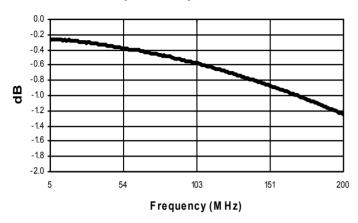


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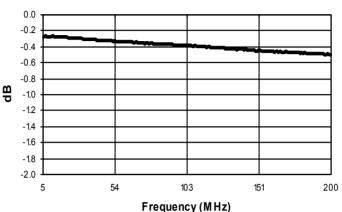
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Typical Performance: $T_A = 25^{\circ}C$, $Z_0 = 75 \Omega$, $P_{IN} = 0 \text{ dBm}$

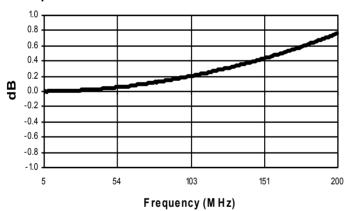
Insertion Loss 1 (Pin5 - Pin1)



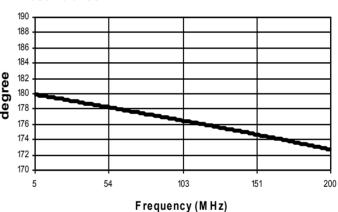
Insertion Loss 2 (Pin5 - Pin3)



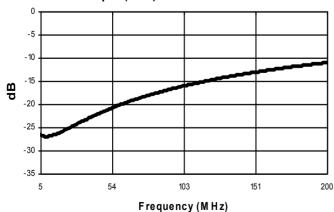
Amplitude Balance



Phase Balance



Return Loss: Input (Pin5)



Note:

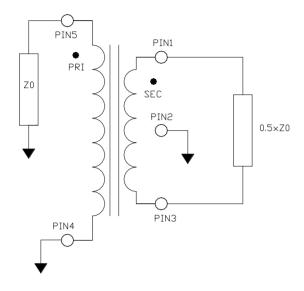
Graphs plotted to 200 MHz for reference only.



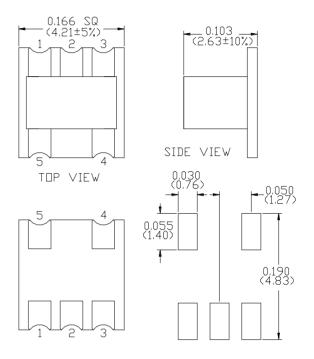
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Application Circuit



Case Style SM-164



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



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