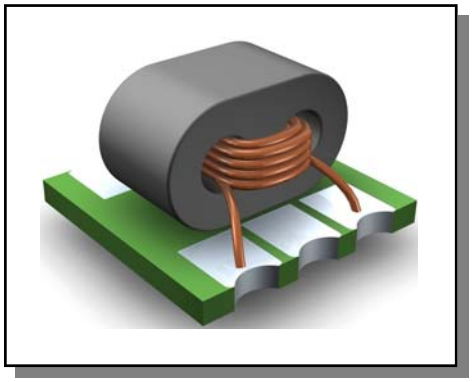
MABA-008482-CF1A40

1:1.78 Step up flux coupled Transformer
5 MHz - 200 MHz

Rev. V3

Features

- 1:1.78 step up flux coupled transformer
- Surface mount
- Separate secondary coils allowing separate bias
- feed into balanced amplifiers
- 260ºC reflow compatible
- RoHS Compliant and Pb free
- Excellent temperature stability
- Can be used on 50Ω and 75Ω systems
- Suitable for all CATV, Broadband and FTTx applications.



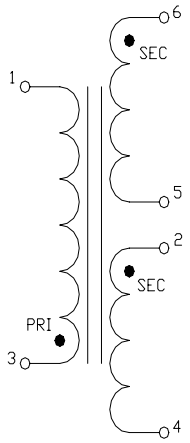
Electrical Specifications: Z_0 = 75Ω, T_A = 25°C, P_{in} = 0dBm

Parameter	Conditions	Units	Min	Typ	Max
Insertion Loss	5 - 80 MHz 80-200 MHz	dB dB	- -	0.35 0.48	0.5 1.0
Amplitude Balance	5 - 100 MHz 100 - 200 MHz	dB dB	- -	0.02 0.14	± 0.2 ± 0.5
Phase Balance	5 - 50 MHz 50 - 100 MHz 100 - 200 MHz	º º º	- - -	0.50 1.95 4.15	± 3 ± 5 ± 10
Input Return Loss	5 - 100 MHz 100 - 200 MHz	dB dB	22 16	25.9 18.4	- -

Pin Configuration

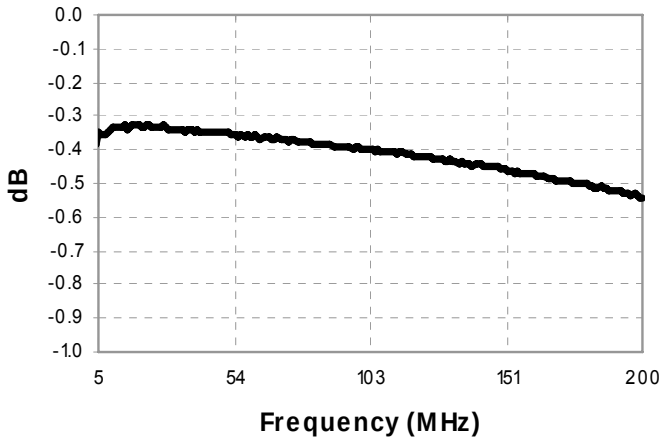
Pin No.	Function
1	Primary (ground)
2	Secondary ground 2
3	Primary Dot (input)
4	Secondary (output 2)
5	Secondary ground 1
6	Secondary Dot (output 1)

Schematic

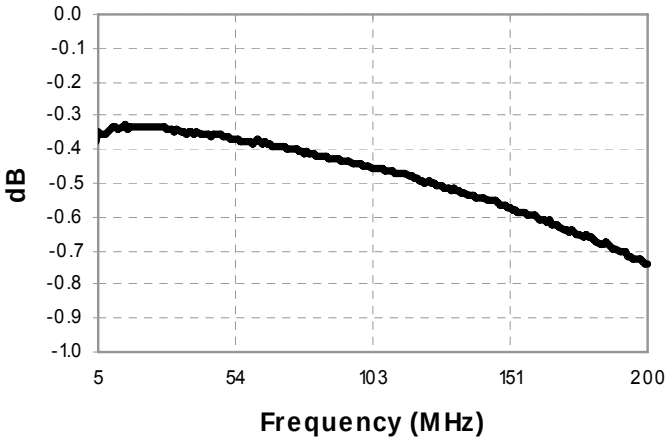


• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.43537383 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

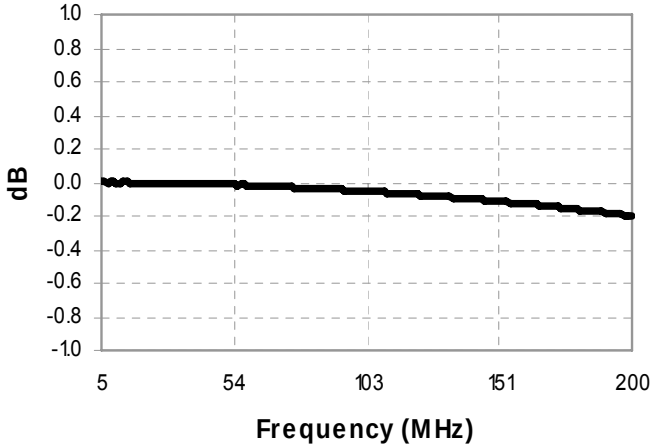
Insertion Loss: (pin3 - pin6)



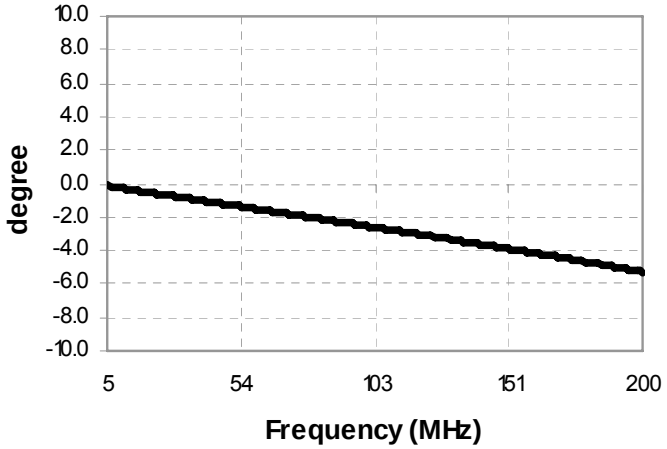
Insertion Loss: (pin3 - pin4)



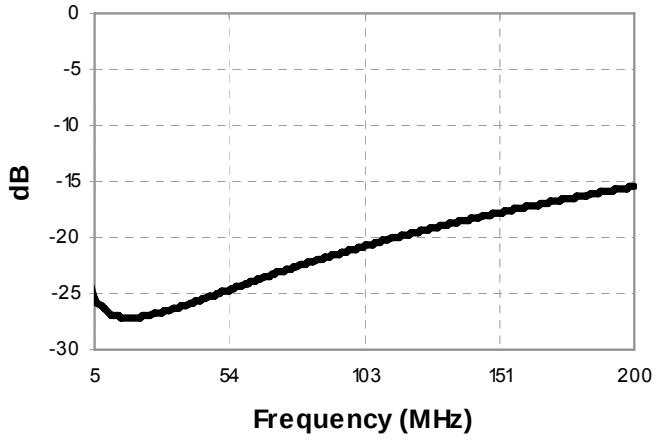
Amplitude Balance



Phase Balance



Return Loss: Input (pin3)



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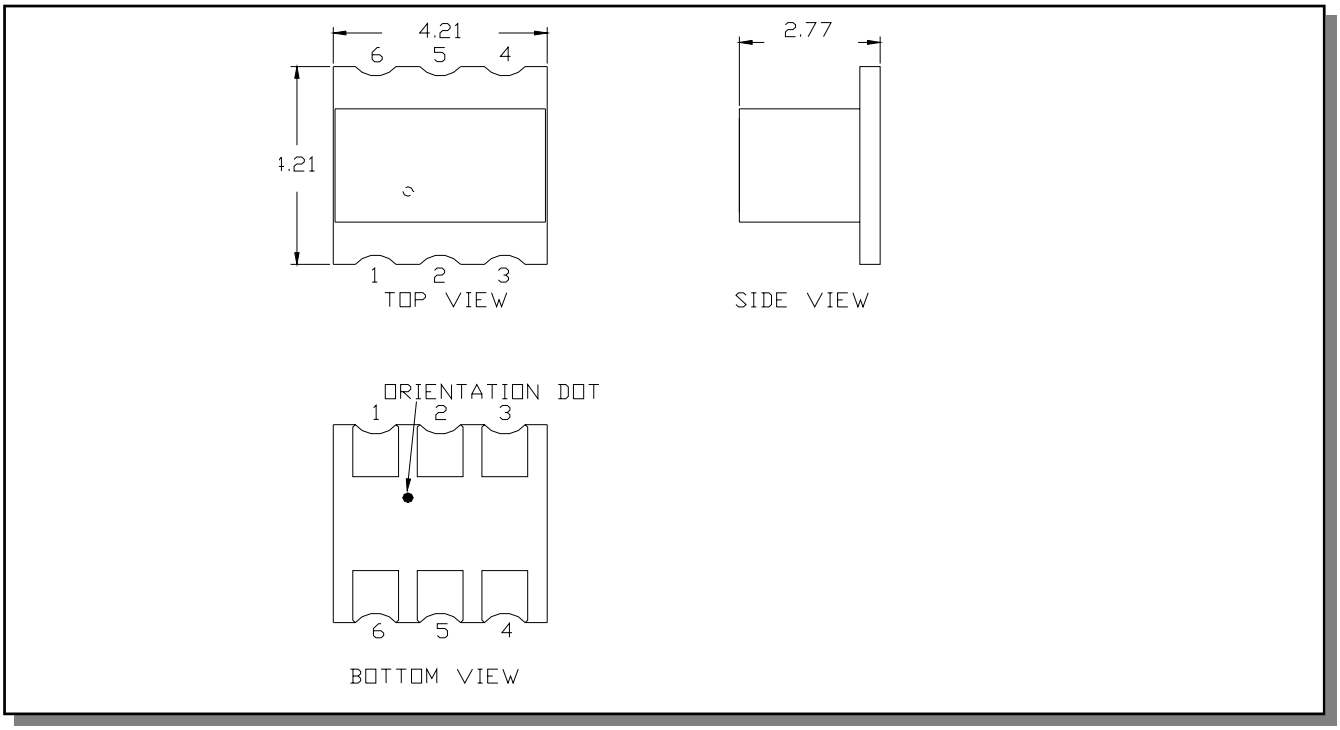
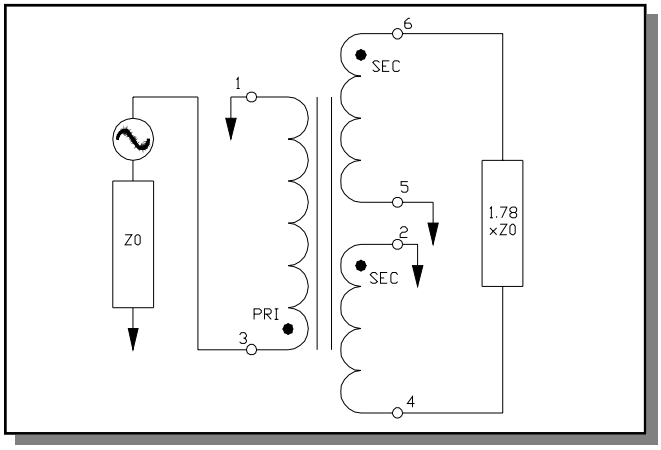
Outline Drawing

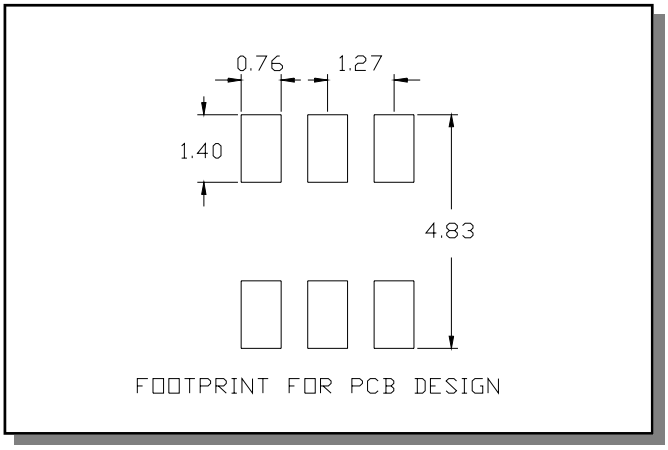


1. Dimensions in mm.
2. Tolerance: ±0.2mm unless otherwise noted.
3. Model number and lot code printed on reel.
4. Plating finish: Electreless nickel immersion Gold 3 - 5 microns nickel 0.05 - 0.15 microns gold.

Application Circuit



Recommended Footprint



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Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width (W)	mm	12.0
Pitch (P_1)	mm	8.0
A_0	mm	4.55
B_0	mm	4.75
K_0	mm	3.1
Orientation	-	F6
Reference Application note ANI-019 for orientation		

Ordering Information

Part Number	Description
MABA-008482-CF1A40	Tape & Reel
MABA-008482-CF1ATB	Customer Evaluation Board

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		30
Operating Temperature Range	ºC	-40	+85
Storage Temperature Range	ºC	-55	+125

Temperature data available on request

ECO History

Rev	Date	Description	ECO
V1	8 Nov 2006	New release	20062512
V2	24 Oct 2007	Updated format, changed start freq to 5MHz	20071943
V3	2 Nov 2010	Increased operating temperature to +85 deg C	20101799