

1.77:1 Flux Coupled Balun Transformer 5 - 100 MHz

M/A-COM Products
Rev. V1

Features

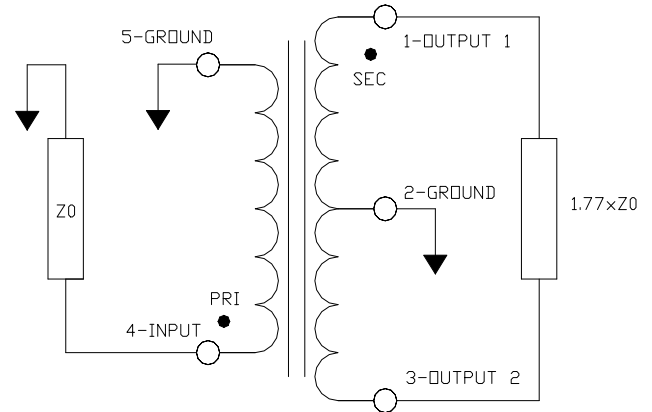
- Surface Mount
- 1.77:1 Impedance
- 75Ω single ended to 133Ω Balance
- RoHS Compliant, lead free
- Available on Tape and Reel

Description

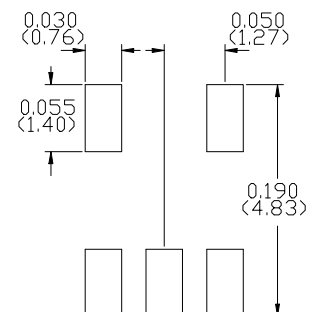
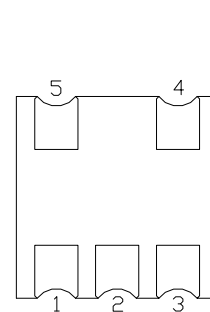
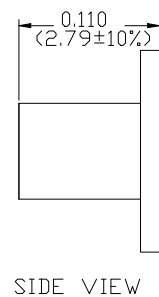
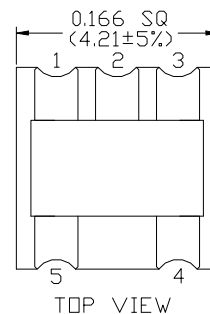
M/A-COM's MABA-009573-CF1A40 is a 1.77:1 RF Flux coupled BalUn Transformer in a low cost surface mount package. Ideally suited for high volume CATV/Broadband applications.



Schematic



Case Style SM-164



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

Pin Configuration

Function	Pin Number
Secondary Dot (output 1)	1
Primary (ground)	2
Secondary (output 2)	3
Primary Dot (Input)	4
(ground)	5

Ordering Information

Parameter	Package
MABA-009573-CF1A40	2000
MABA-009573-CF1ATB	Customer Test Board

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Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range	5 - 100 MHz				
Insertion Loss 1 (Pin 4 to Pin 1)	5 - 50 MHz	dB	-	0.3	0.4
	50 - 100 MHz	dB	-	0.3	0.5
Insertion Loss 2 (Pin 4 to Pin 3)	5 - 50 MHz	dB	-	0.3	0.4
	50 - 100 MHz	dB	-	0.4	0.5
Amplitude Balance	5 - 100 MHz	dB	-	0.01	± 0.1
Phase Balance	5 - 100 MHz	$^\circ$	-	0.2	± 2.0
Input Return Loss (Pin 4)	5 - 100 MHz	dB	24	27	-

Absolute Maximum Ratings

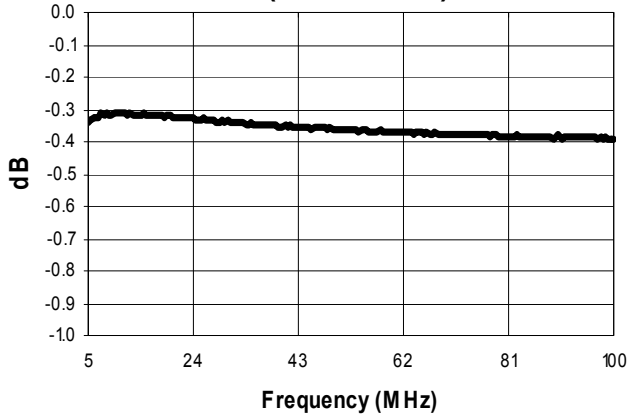
Parameter	Absolute Maximum
RF Power	250mW
DC Current	30mA
Operating Temperature	-40°C to $+85^\circ\text{C}$
Storage Temperature	-40°C to $+85^\circ\text{C}$

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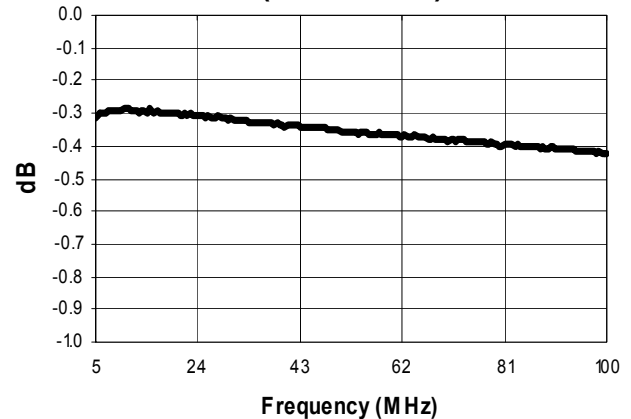
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Typical Performance: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

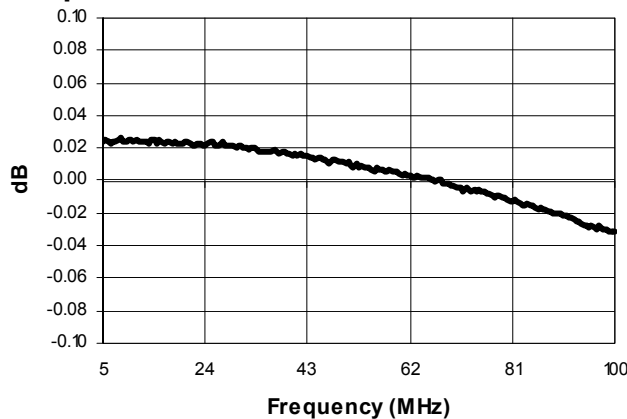
Insertion Loss 1 (Pin4 - Pin1)



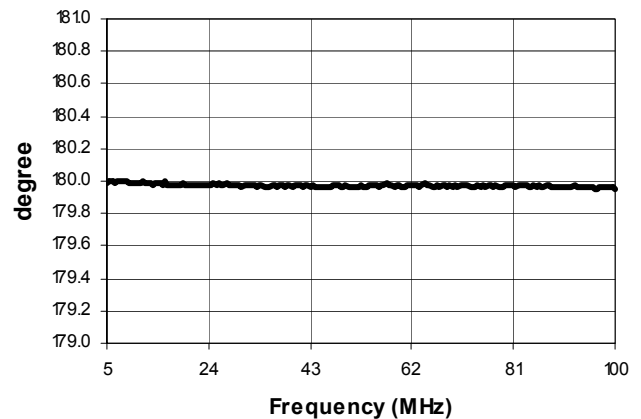
Insertion Loss 2 (Pin4 - Pin3)



Amplitude Balance



Phase Balance



Return Loss: Input (Pin4)

