

# 1.77:1 Flux Coupled Balun Transformer 5 - 100 MHz

Rev. V2

#### **Features**

- Surface Mount Package
- 1.77:1 Impedance
- 75  $\Omega$  Single Ended to 133  $\Omega$  Balance
- · RoHS Compliant, Lead Free
- · Available on Tape and Reel

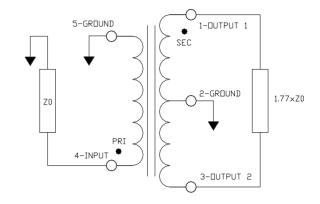
#### **Description**

The MABA-009573-CF1A40 is a 1.77:1 RF flux coupled balun transformer in a surface mount package.

Ideally suited for high volume CATV/Broadband applications.



#### **Functional Schematic**



#### **Pin Configuration**

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

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

Parameter	Test Conditions	Units	Min.	Тур.	Max.
Insertion Loss 1 (Pin 4 to Pin 1)	5 - 50 MHz 50 - 100 MHz	dB	_	0.3 0.3	0.4 0.5
Insertion Loss 2 (Pin 4 to Pin 3)	5 - 50 MHz 50 - 100 MHz	dB		0.3 0.4	0.4 0.5
Amplitude Balance	<del></del>	dB	_	0.01	±0.1
Phase Balance	_	0		0.2	±2.0
Input Return Loss (Pin 4)	<del>-</del>	dB	24	27	ı

### **Ordering Information**

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

### **Absolute Maximum Ratings**

Parameter	Absolute Maximum		
RF Input Power	250 mW		
DC Current	30 mA		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-40°C to +85°C		

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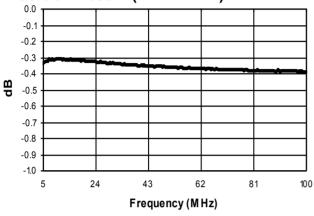


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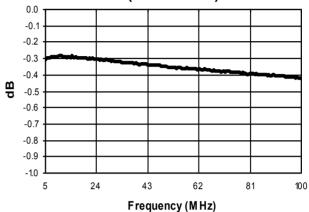
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Typical Performance:  $T_A = 25^{\circ}C$ ,  $Z_0 = 75 \Omega$ ,  $P_{IN} = 0 \text{ dBm}$ 

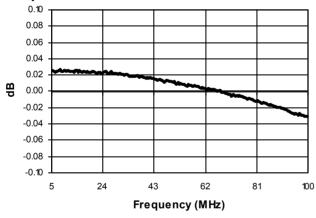
#### **Insertion Loss 1 (Pin4 - Pin1)**



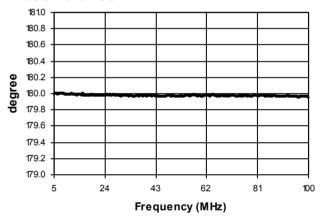
### Insertion Loss 2 (Pin4 - Pin3)



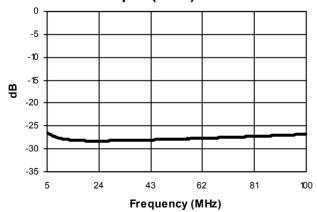
#### **Amplitude Balance**



#### **Phase Balance**



#### **Return Loss: Input (Pin4)**

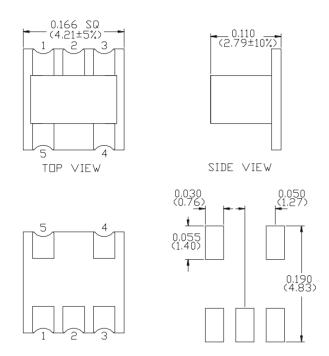




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#### Case Style SM-164



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



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