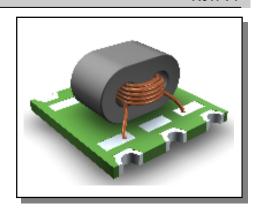


## 1:1 Flux Coupled Transformer 0.3-200MHz

Rev. V1

#### **Features**

- ◆ Surface mount
- ♦ 1:1 Impedance
- ♦ 260°C reflow compatible
- ♦ RoHS Compliant
- ◆ Centre tap on secondary



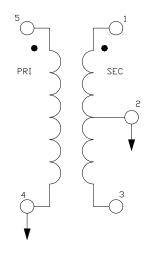
# **Electrical Specifications:** $Z_0 = 75\Omega$ , $T_A = 25$ °C

Parameter	Conditions	Units	Min	Тур	Max
Insertion Loss 1 (Pin 1-5)	0.3 - 5 MHz 5 - 200 MHz	dB dB	-	1.0 0.5	2.6 0.9
Insertion Loss 2 (Pin 3-5)	0.3 - 10 MHz 10 - 200 MHz	dB dB	-	1.0 0.4	2.6 0.75
Amplitude Unbalance (Nominal 0dB)	0.3 - 200 MHz	dB	-	±0.1	±0.3
Phase Unbalance (Nominal 180°)	0.3 - 200 MHz	0	-	±0.3	±3.0
Input Return Loss	0.3 - 5 MHz 5 - 120 MHz 120 - 200 MHz	dB dB dB	5 19 15	13 27 21	-

# **Pin Configuration**

Pin No.	Function	
1	Secondary Dot	
2	Secondary centre tap	
3	Secondary	
4	Primary	
5	Primary Dot	

## **Schematic**



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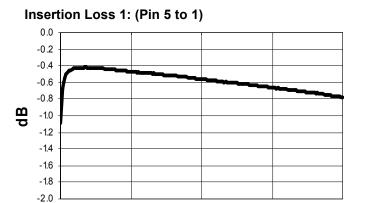


1:1 Flux Coupled Transformer 0.3-200MHz

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200

# Typical Performance Curves: $T_A = 25^{\circ}C$ , $Z_0 = 75\Omega^{1}$



100

Frequency (MHz)

# Insertion Loss 2: (Pin 5 to 3) 0.0 -0.2 -0.4 -0.6 -0.8 -10 -12 -14 -16 -18 -2.0

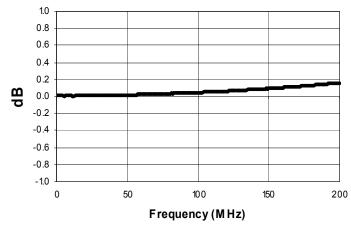
100

Frequency (MHz)

### **Amplitude Unbalance**

50

0

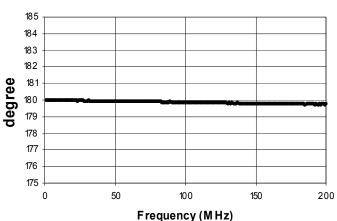


#### **Phase Balance**

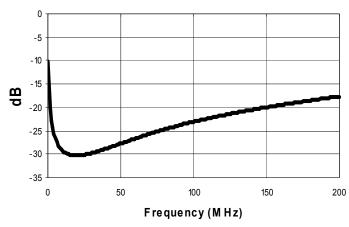
0

50

200



#### **Input Return Loss**



ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

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PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology
Solutions has under development. Performance is based on engineering to the profit of the strength of the strength

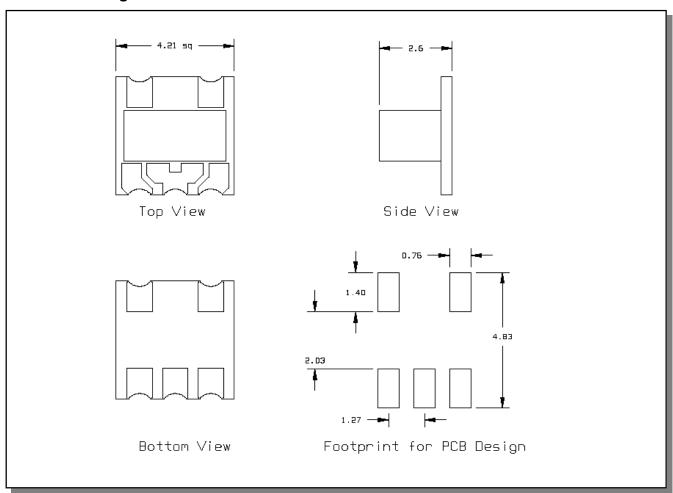
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1:1 Flux Coupled Transformer 0.3-200MHz

Rev. V1

## **Outline Drawing**



- 1. Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code are printed on the reel.
- 4. Finish: Electroless nickel immersion gold



1:1 Flux Coupled Transformer 0.3-200MHz

Rev. V1

## **Tape & Reel Information**

Parameter	Units	Value
Qty per reel	-	2000
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Ao	mm	4.5
Во	mm	4.5
Ko	mm	2.73
Orientation	-	F5

Reference Application Note ANI-019 for orientation

# **Ordering Information**

Part Number	Description
MABA-010544-CT0071	Tape & Reel
MABA-008350-CT71TB	Customer Evaluation Board

## **Recommended Maximum Ratings**

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		240
Operating Temperature Range	°C	-40	+85
Storage Temperature Range	°C	-55	+125

Full temperature plots available on request

# **ECO History**

Rev	Date	Description	ECN NO.
V1	30 Sep, 2010	New Release	20101528

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