

Transformer, 1:1 Flux Coupled Transformer 5 to 200 MHz

Rev. V6

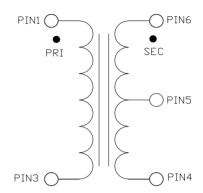
Features

- Surface mount
- 1:1 Impedance ratio
- · Centre tap on Secondary
- Suitable for DOCSIS 3.0
- 260°C reflow compatible
- RoHS* compliant
- · Available on tape and reel.

Description

M/A-COM Technology Solutions MABA-009594-CF18A0 is a 1:1 RF Flux coupled transformer in a low cost, surface mount package. Ideally suited for broadband CATV applications.



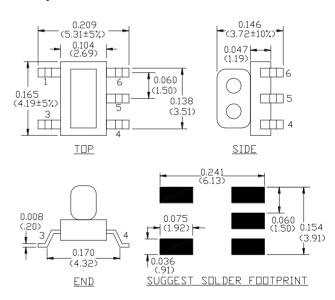




Pin Configuration

Pin No.	Function
1	Primary Dot
3	Primary
4	Secondary
5	Secondary Centre Tap
6	Secondary dot

Component Dimensions



Dimensions in inches [mm] Tolerance: $.xx \pm .02$, $.xxx \pm .010$, unless otherwise stated

^{*} Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

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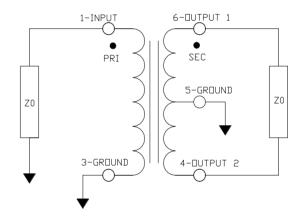
Electrical Specifications: $T_A = 25$ °C, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0$ dBm

Parameter	Test Conditions	Units	Min	Тур	Max
Insertion Loss	5 - 60 MHz 60 - 150 MHz 150 - 200 MHz	dB dB dB	- - -	0.3 0.4 0.7	0.6 0.8 1.0
Amplitude Unbalance (Nominal 0dB)	5 - 60 MHz 60 - 200 MHz	dB dB	-	0.0 0.2	±0.1 ±0.4
Phase Unbalance (Nominal 180°)	5 - 60 MHz 60 - 200 MHz	0	-	0.1 0.3	±2.0 ±4.0
Input Return Loss	5 - 60 MHz 60 - 200 MHz	dB dB	22 14	31 17	-

Recommended Maximum Ratings

Parameter	Value
Input power	+28dBm (631mW)
DC current (tested at 5V)	600mA
Operating Temperature	-40°C to +100°C
Storage Temperature	-55°C to +100°C

Application Circuit



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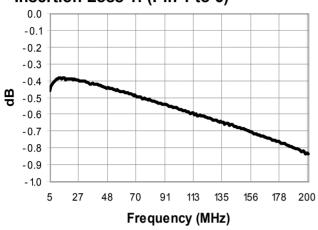


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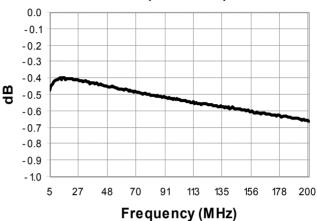
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Typical Performance Curves: $T_A = 25^{\circ}C$, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0dBm$

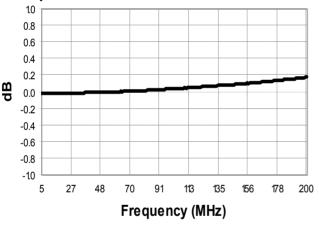
Insertion Loss 1: (Pin 1 to 6)



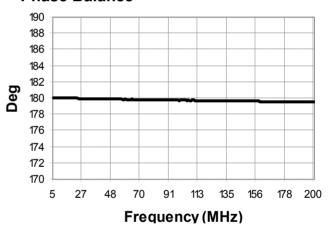
Insertion Loss 2: (Pin 1 to 4)



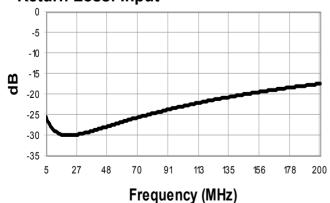
Amplitude Balance



Phase Balance



Return Loss: Input

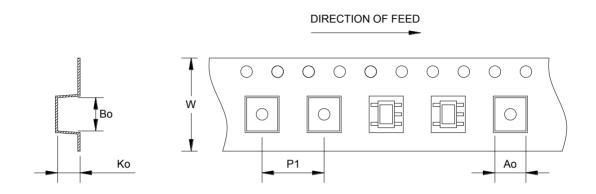




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Tape & Reel Information



Item	Dimension	
Ao	5.60mm +/- 0.1mm	
Во	4.50mm +/- 0.1mm	
Ko	4.00mm +/- 0.1mm	
W	12.00mm +/- 0.3mm	
P1	8.00mm +/- 0.1mm	

Ordering Information

Part number	Description	
MABA-009594-CF18A0	2000 piece reel	
MABA-009594-CF18TB	Customer Test Board	

MABA-009594-CF18A0



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