

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

Rev. V2

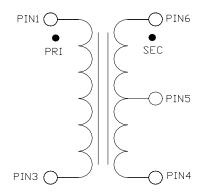
Features

- 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.



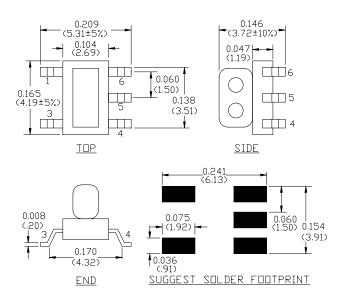




Pin Configuration

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 ± .02, .xxx ± .010, unless otherwise stated

• India Tel: +91.80.43537383

• China Tel: +86.21.2407.1588

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



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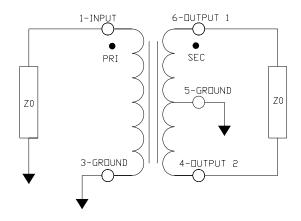
Electrical Specifications: $T_A = 25$ °C, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0$ dBm

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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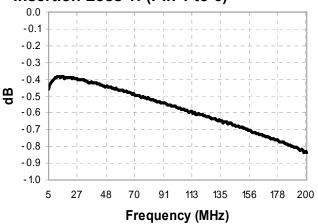


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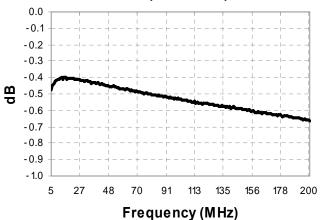
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Typical Performance Curves: $T_A = 25$ °C, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0$ dBm

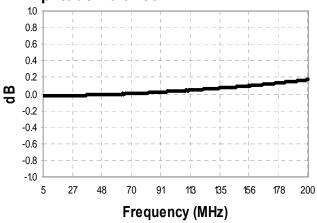
Insertion Loss 1: (Pin 1 to 6)



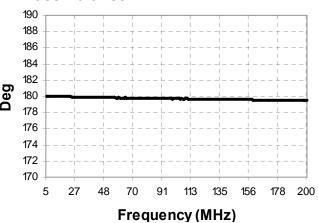
Insertion Loss 2: (Pin 1 to 4)



Amplitude Balance

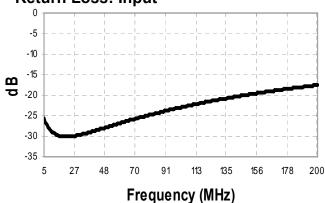


Phase Balance



Return Loss: Input

3



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. PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

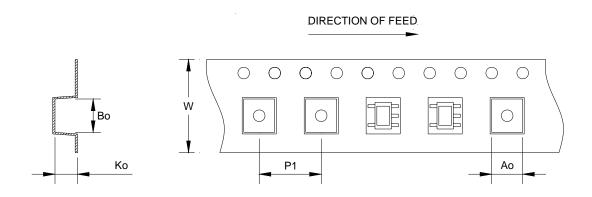
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Tape & Reel Information



Item	Dimension	
Ao	6.10mm +/- 0.1mm	
Во	4.60mm +/- 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	

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