

1.5:1 Flux Coupled Transformer 5-350MHz

MABA-007766-CF28A0
V1P

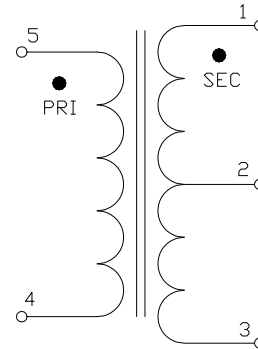
Features

- Surface Mount
- 1.5:1 Impedance
- Excellent amplitude and phase balance
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of MABAES0025.
- Available on Tape and Reel. Reel quantity 2000

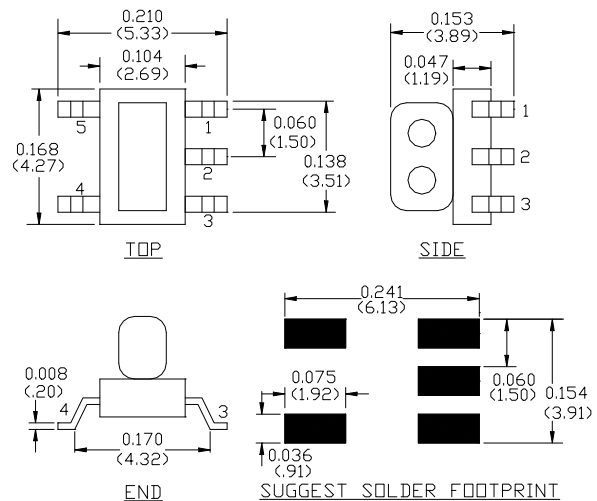
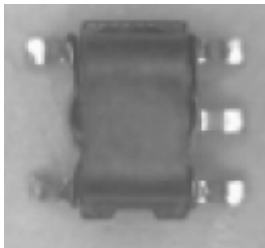
Description

M/A-COM's MABA-007766-CF28A0 is a 1.5:1 RF transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications. Typical applications include single to balanced mode conversion and impedance matching.

Schematic



Case Style: SM-138



Pin Configuration

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

Note: Reference Application Note **M513** for reel size information.

Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

Ordering Information

Part Number	Package
MABA-007766-CF28A0TR	2000 piece reel
MABA-007766-CF28TB	Customer Test Board

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

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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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Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$

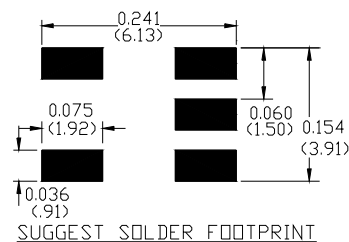
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss	5 - 200 MHz	dB	-	0.7	1.0
	200 - 350 MHz	dB	-	1.4	2.0
Amplitude Imbalance	5 - 200 MHz	dB	-	± 0.2	± 0.5
	200 - 350 MHz	dB	-	± 0.4	± 1.0
Phase Imbalance	5 - 200 MHz	$^\circ$	-	± 1.0	± 2.0
	200 - 350 MHz	$^\circ$	-	± 2.0	± 3.0

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum
Max Input Power	250mW
DC current	200mA
Operating Temperature	-40°C to $+85^\circ\text{C}$
Storage Temperature	-40°C to $+85^\circ\text{C}$

- Exceeding any one or combination of these limits may cause permanent damage to this device.
- M/A-COM does not recommend sustained operation near these survivability limits.

Recommended PCB Configuration

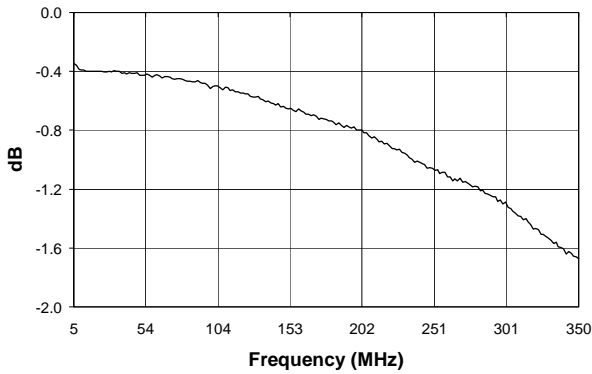


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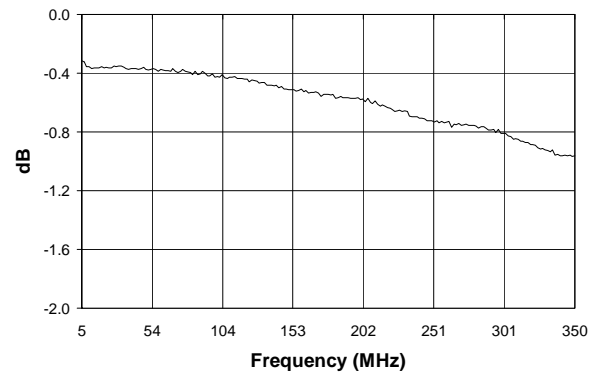
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Typical Performance Curves: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$

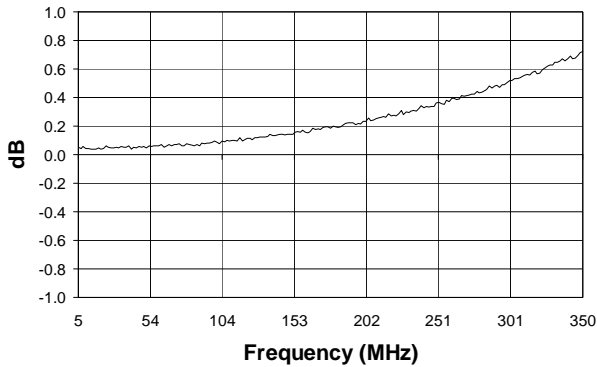
Insertion Loss 1: From pin 5 to pin 1



Insertion Loss 2: From pin 5 to pin 3



Amplitude Unbalance



Phase Balance

