

**1.5:1 Flux Coupled Transformer  
5-350MHz**

**MABA-007766-CF28A0  
V1P**

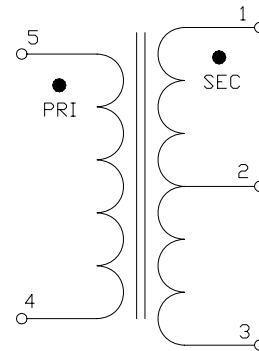
**Features**

- 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

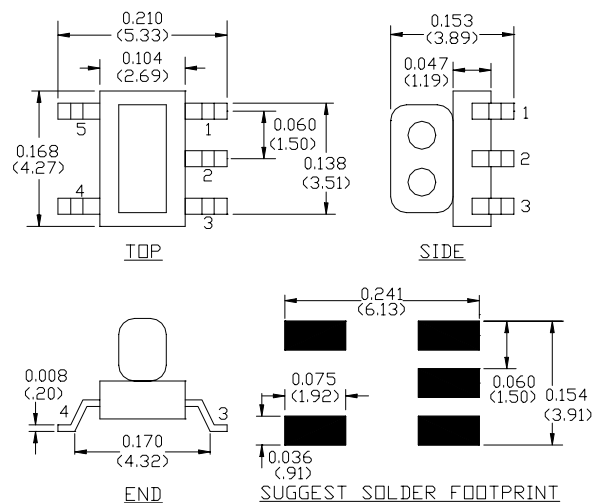
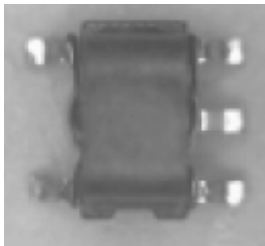
**Description**

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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Visit [www.macom.com](http://www.macom.com) for additional data sheets and product information.

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

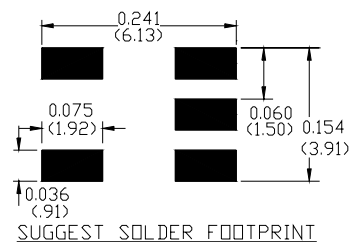
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss	5 - 200 MHz	dB	-	0.7	1.0
	200 - 350 MHz	dB	-	1.4	2.0
Amplitude Imbalance	5 - 200 MHz	dB	-	$\pm 0.2$	$\pm 0.5$
	200 - 350 MHz	dB	-	$\pm 0.4$	$\pm 1.0$
Phase Imbalance	5 - 200 MHz	$^\circ$	-	$\pm 1.0$	$\pm 2.0$
	200 - 350 MHz	$^\circ$	-	$\pm 2.0$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

**Absolute Maximum Ratings <sup>1,2</sup>**

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

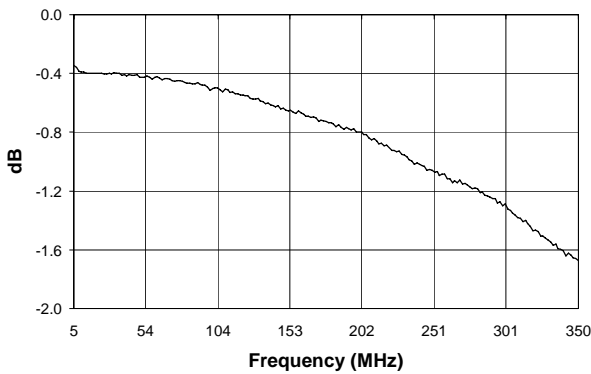
- Exceeding any one or combination of these limits may cause permanent damage to this device.
- M/A-COM does not recommend sustained operation near these survivability limits.

**Recommended PCB Configuration**

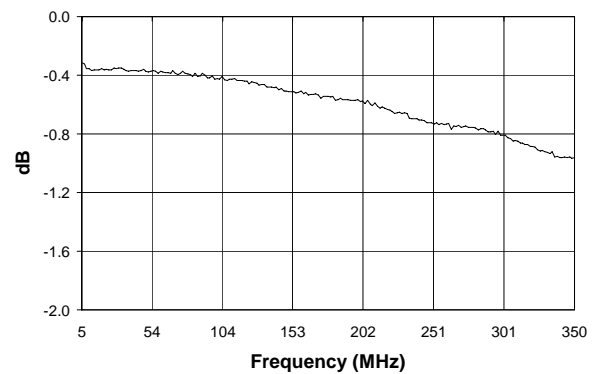


**Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$**

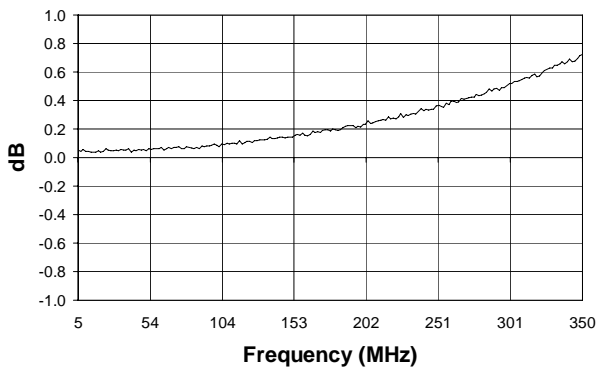
**Insertion Loss 1: From pin 5 to pin 1**



**Insertion Loss 2: From pin 5 to pin 3**



**Amplitude Unbalance**



**Phase Balance**

