# imall

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

#### Features

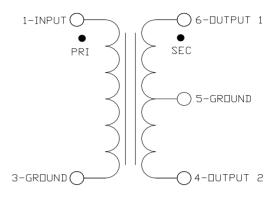
- Surface mount
- 1:1 Impedance ratio
- Centre tap on secondary
- 75Ω single ended to 75Ω balanced
- Suitable for DOCSIS 3.0
- 260°C reflow compatible
- RoHS\* compliant
- Available on tape and reel.

### Description

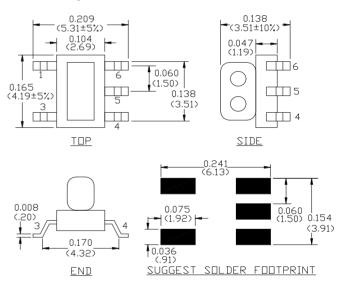
M/A Com's MABA-009572-CF18A0 is a 1:1 RF Flux coupled transformer in a low cost, surface mount package. Ideally suited for broadband CATV applications.



### Schematic



### Case Style: SM-138



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

### **Ordering Information**

Part number	Description		
MABA-009572-CF18A0	2000 piece reel		
MABA-009572-CF18TB	Customer Test Board		

### **Pin Configuration**

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

Note: Reference Application Note M513 for reel size information.

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

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

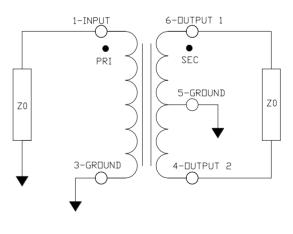
### Electrical Specifications: $T_A = 25^{\circ}C$ , 0dBm, $Z_0 = 75\Omega$

Parameter	Test Conditions	Units	Min	Тур	Max
Insertion Loss	5 - 60 MHz	dB	-	0.36	0.5
	60 - 150 MHz	dB	-	0.50	0.7
	150 - 200 MHz	dB	-	0.67	1.0
Amplitude Unbalance	5 - 60 MHz	dB		0.01	±0.1
(Nominal 0dB)	60 - 200 MHz	dB		0.09	±0.5
Phase Unbalance	5 - 60 MHz	0		0.1	±1.0
(Nominal 180°)	60 - 200 MHz	0		0.5	±3.0
Input Return Loss	5 - 60 MHz 60 - 200 MHz	dB dB	20 12	29 19	-

### **Recommended Maximum Ratings**

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

### **Application Circuit**



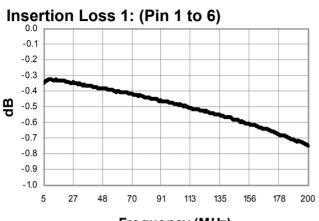
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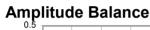
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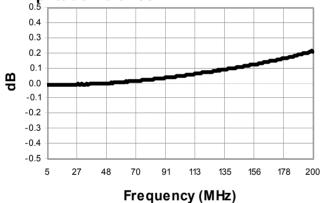
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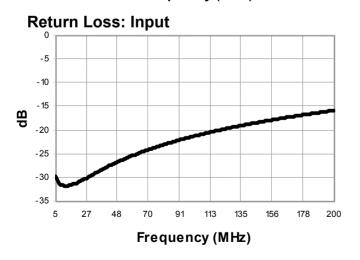
### Typical Performance Curves: $T_A = 25^{\circ}C$ , 0dBm, $Z_0 = 75\Omega$

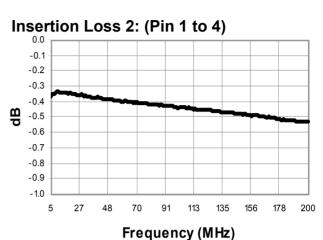


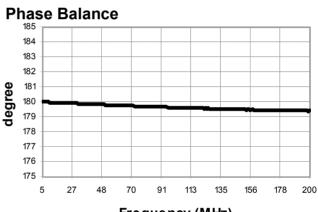












Frequency (MHz)



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