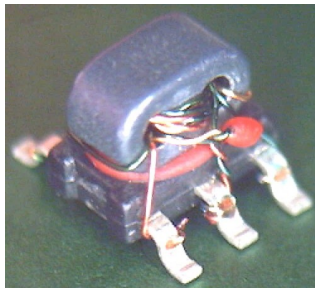


## Features

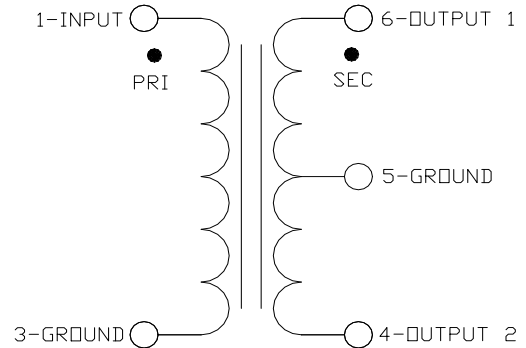
- Surface mount
- 1:1 Impedance ratio
- Centre tap on secondary
- 75Ω single ended to 75Ω balanced
- Suitable for DOCSIS 3.0
- 260°C reflow compatible
- RoHS\* compliant
- Available on tape and reel.

## Description

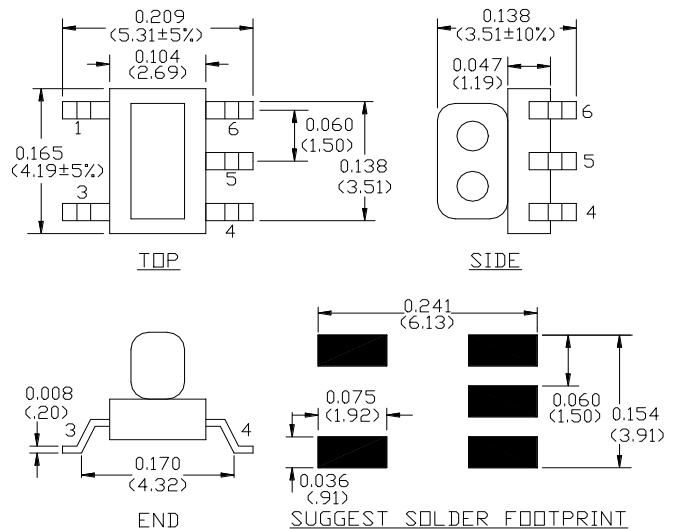
M/A Com's MABA-009572-CF18A0 is a 1:1 RF Flux coupled transformer in a low cost, surface mount package. Ideally suited for broadband CATV applications.



## Schematic



## Case Style: SM-138



## Pin Configuration

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

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

## Ordering Information

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

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

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

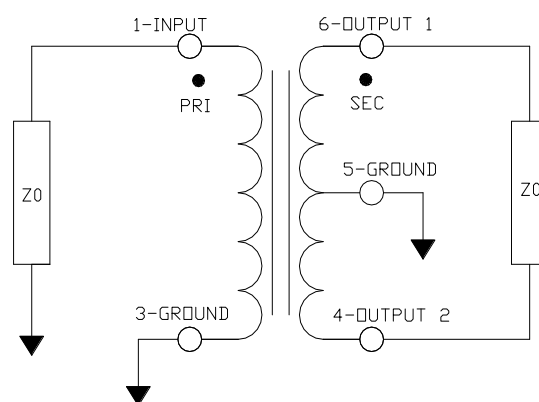
**Electrical Specifications:  $T_A = 25^\circ\text{C}$ , 0dBm,  $Z_0 = 75\Omega$**

Parameter	Test Conditions	Units	Min	Typ	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 (Nominal 0dB)	5 - 60 MHz	dB	-	0.01	$\pm 0.1$
	60 - 200 MHz	dB	-	0.09	$\pm 0.5$
Phase Unbalance (Nominal 180°)	5 - 60 MHz	°	-	0.1	$\pm 1.0$
	60 - 200 MHz	°	-	0.5	$\pm 3.0$
Input Return Loss	5 - 60 MHz	dB	20	29	-
	60 - 200 MHz	dB	12	19	-

### Recommended Maximum Ratings

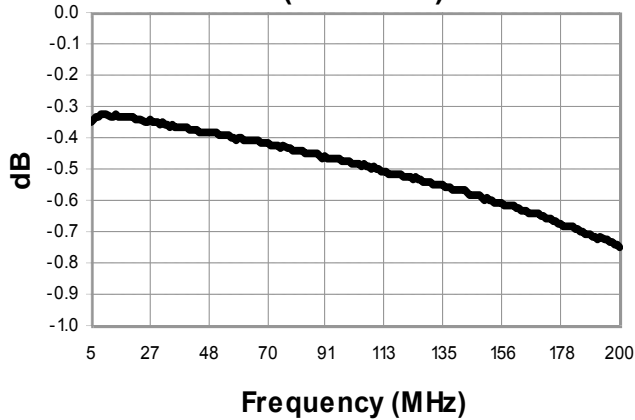
Parameter	Value
Input power	At least +28dBm (631mW)
DC current (tested at 5V)	At least 600mA
Operating Temperature	-40°C to +100°C
Storage Temperature	-55°C to +100°C

### Application Circuit

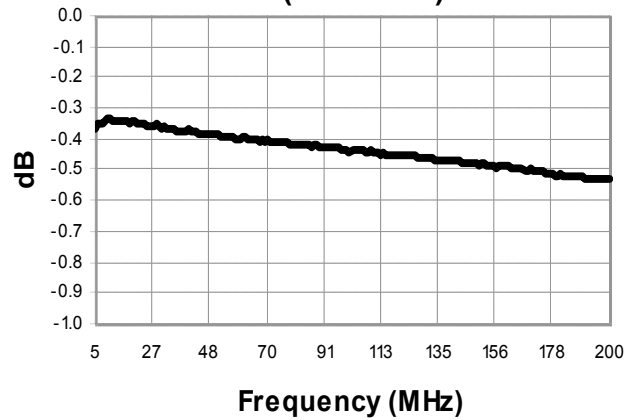


Typical Performance Curves:  $T_A = 25^\circ\text{C}$ , 0dBm,  $Z_0 = 75\Omega$

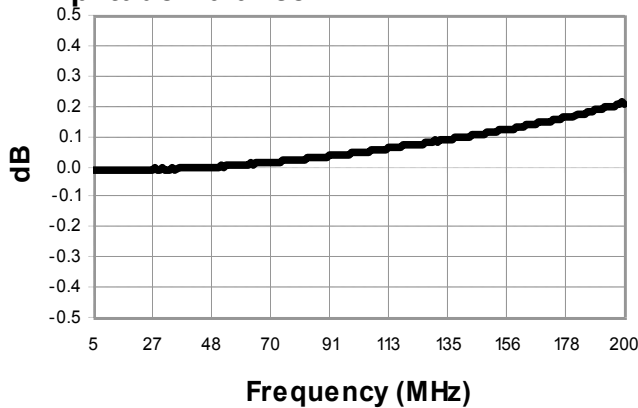
Insertion Loss 1: (Pin 1 to 6)



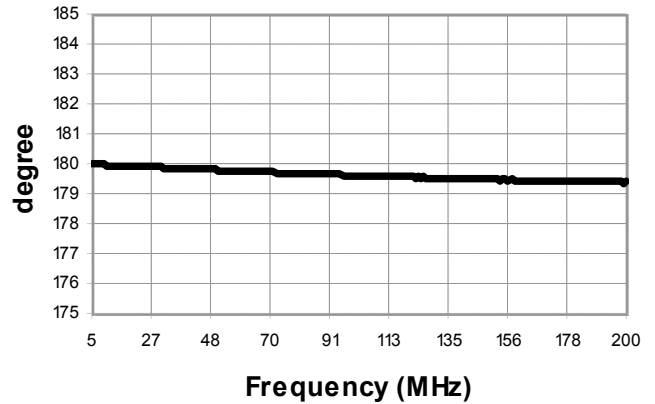
Insertion Loss 2: (Pin 1 to 4)



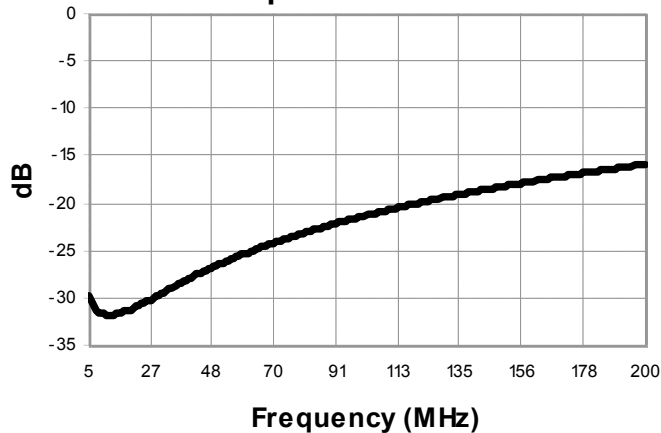
Amplitude Balance



Phase Balance



Return Loss: Input



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