MABA-009572-CF18A0

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

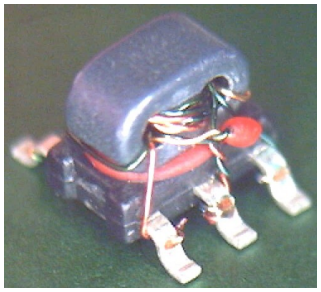
Rev. V3

Features

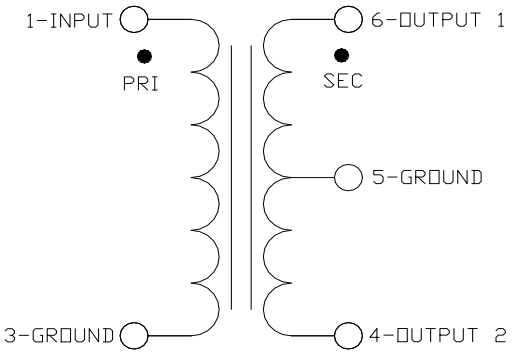
- Surface mount
- 1:1 Impedance ratio
- Centre tap on secondary
- 75Ω single ended to 75Ω balanced
- Suitable for DOCSIS 3.0
- 260°C reflow compatible
- RoHS* compliant
- Available on tape and reel.

Description

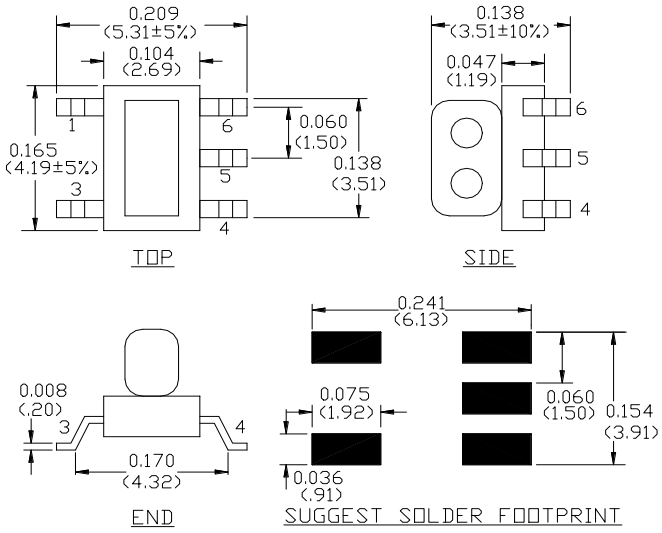
M/A Com's MABA-009572-CF18A0 is a 1:1 RF Flux coupled transformer in a low cost, surface mount package. Ideally suited for broadband CATV applications.



Schematic



Case Style: SM-138



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

Pin Configuration

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

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.

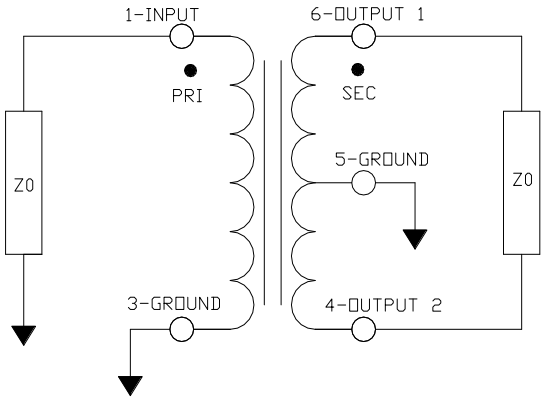
Electrical Specifications: T_A = 25°C, 0dBm, Z_0 = 75Ω

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

Recommended Maximum Ratings

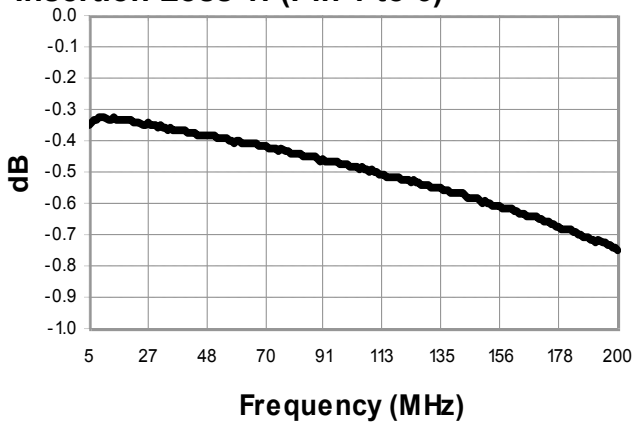
Parameter	Value
Input power	At least +28dBm (631mW)
DC current (tested at 5V)	At least 600mA
Operating Temperature	-40°C to +100°C
Storage Temperature	-55°C to +100°C

Application Circuit

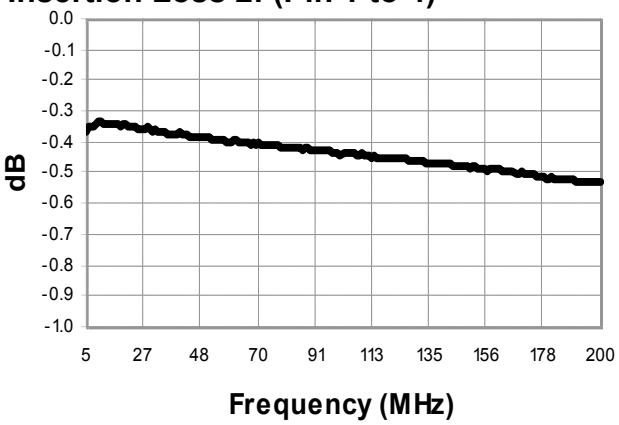


Typical Performance Curves: T_A = 25°C, 0dBm, Z_0 = 75Ω

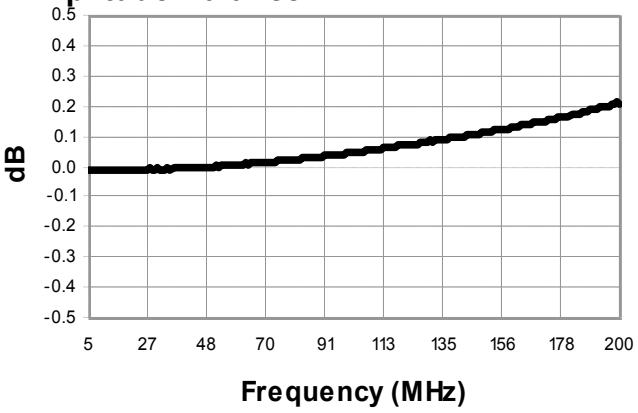
Insertion Loss 1: (Pin 1 to 6)



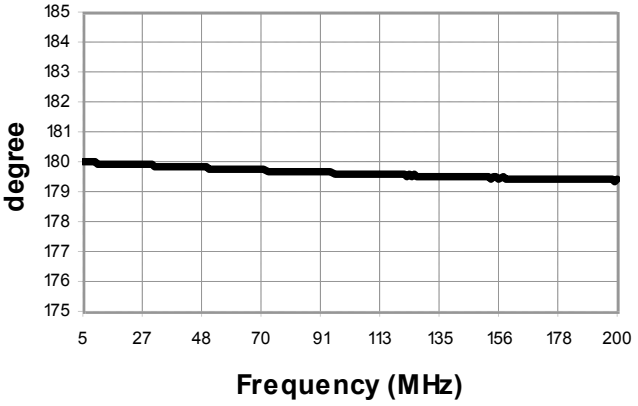
Insertion Loss 2: (Pin 1 to 4)



Amplitude Balance



Phase Balance



Return Loss: Input