

**4:1 RF Flux Coupled Transformer
5-200MHz**

**MABA-007819-CF48A0
V1P**

Features

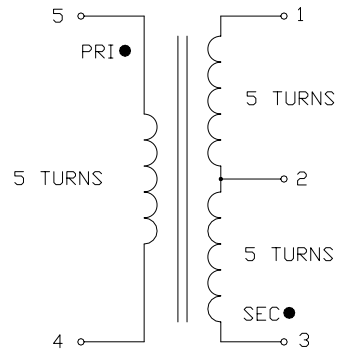
- Surface Mount
- 4:1 Impedance
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of MABACT0018
- Available on Tape and Reel. Reel quantity 2000

Description

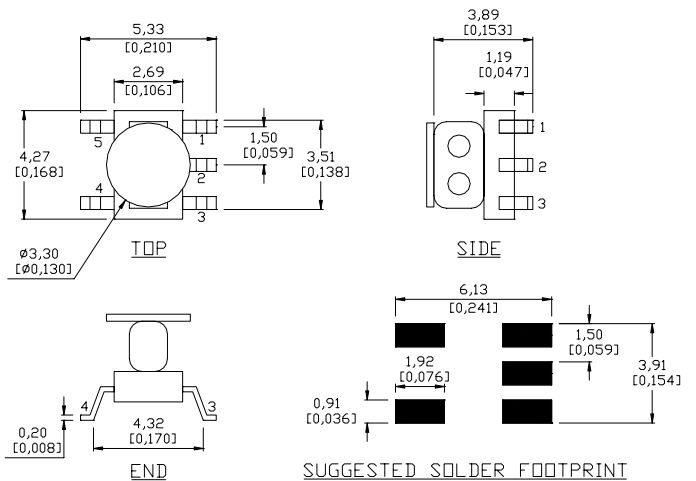
M/A-COM's MABA-007819-CF48A0 is a 4:1 RF flux coupled step up transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



Schematic



Case Style: SM-138-A



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

Pin Configuration

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

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

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

Ordering Information

Part Number	Package
MABA-007819-CF48A0	2000 piece reel
MABA-007819-CF48TB	Customer Test Board

- **North America** Tel: 800.366.2266 / Fax: 978.366.2266
- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Visit www.macom.com for additional data sheets and product information.

Electrical Specifications: $T_A = 25^\circ\text{C}$

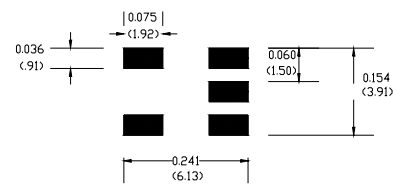
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss	5 - 65 MHz	dB	-	0.4	0.7
	65 - 200 MHz	dB	-	0.9	1.5
Amplitude Unbalance	5 - 65 MHz	dB	-	± 0.02	± 0.1
	65 - 200 MHz	dB	-	± 0.2	± 0.5
Phase Unbalance	5 - 65 MHz	$^\circ$	-	± 0.4	± 2.0
	65 - 200 MHz	$^\circ$	-	± 2.0	± 8.0
Input Return Loss	5 - 65 MHz	dB	15	22	-
	65 - 200 MHz	dB	7	11	-

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum
RF Power	50mW
Peak IF Current	200mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

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

Recommended PCB Configuration



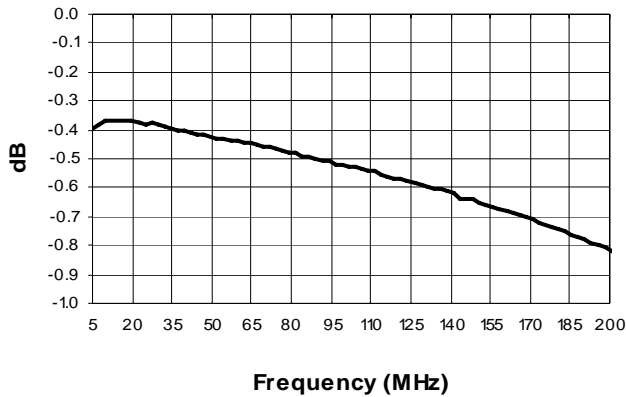
SUGGEST SOLDER FOOTPRINT

**4:1 RF Flux Coupled Transformer
5-200MHz**

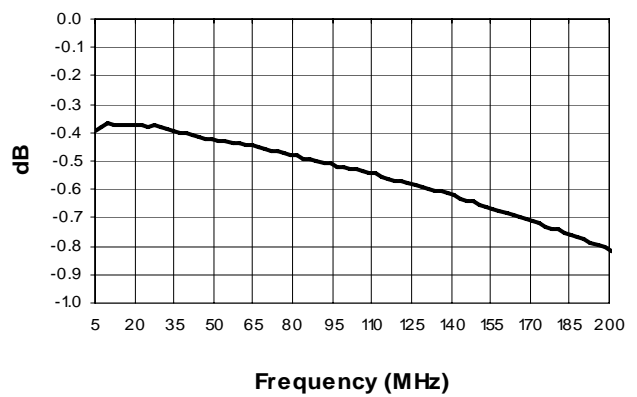
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Typical Performance Curves: $T_A = 25^\circ\text{C}$

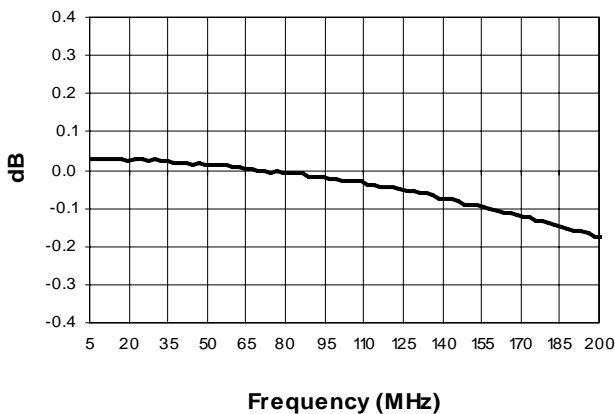
Insertion Loss 1



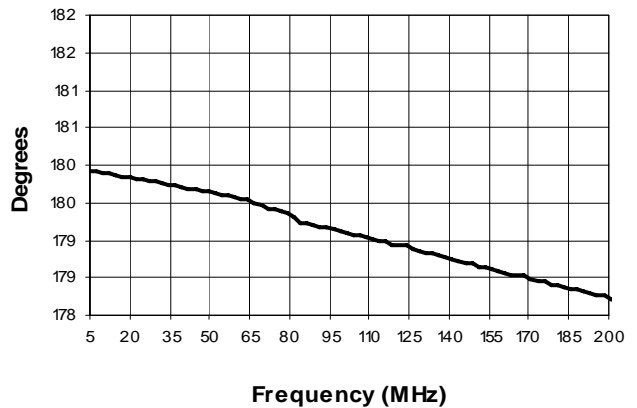
Insertion Loss 2



Amplitude Unbalance



Phase Balance



Input Return Loss

