

**1:1 Flux Coupled Balun Transformer
5-120MHz**

**MABA-008182-CF1160
V1**

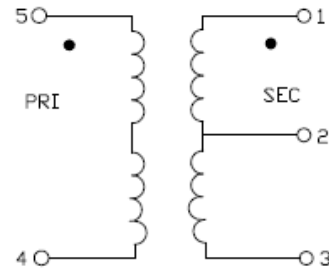
Features

- Surface Mount
- 1:1 Impedance
- RoHS* Compliant
- RoHS version of MABACT0031
- Available on Tape and Reel. Reel quantity 2000

Description

M/A-COM's MABA-008182-CF1160 is a 1:1 RF Flux Coupled Transformer in a low cost, surface mount package. Ideally suited for high volume cellular & wireless applications.

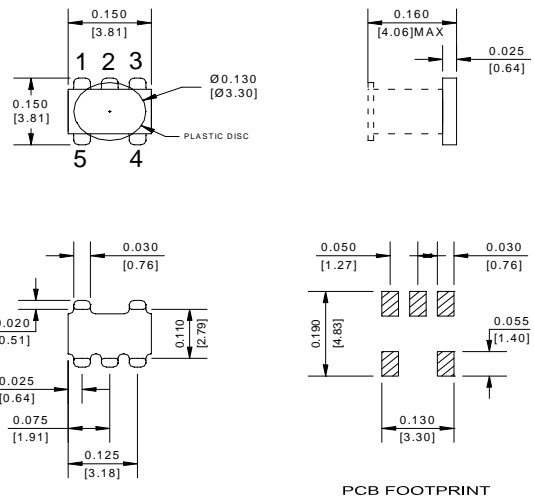
Schematic



Pin

Pin No.	Function
1	Secondary (Output coupled)
2	Not connected (Ground)
3	Secondary Dot (Output thru)
4	Primary Dot (Input)
5	Primary (Ground)

Case Style: SM-22A



PCB FOOTPRINT

Ordering Information

Part Number	Package
MABA-008182-CF1160	2000
MABA-008182-CF11TB	Customer Test Board

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

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

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

- **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.

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Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$ ¹

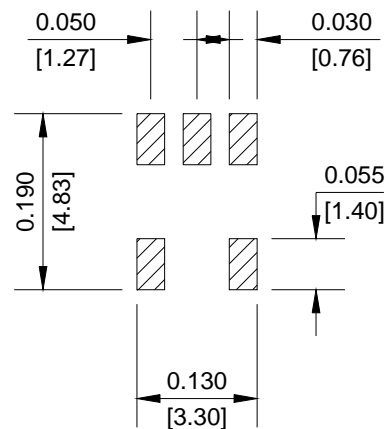
Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss (above -3dB)	50 - 120MHz	dB	-	0.5	0.5
Amplitude Unbalance	50 - 120MHz	dB	-	0.2	0.4
Phase Unbalance	50 - 120MHz	°	-	1	4
Input Return Loss	50 - 75MHz	dB	20	25	-
	75 - 120MHz	dB	15	20	-

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°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

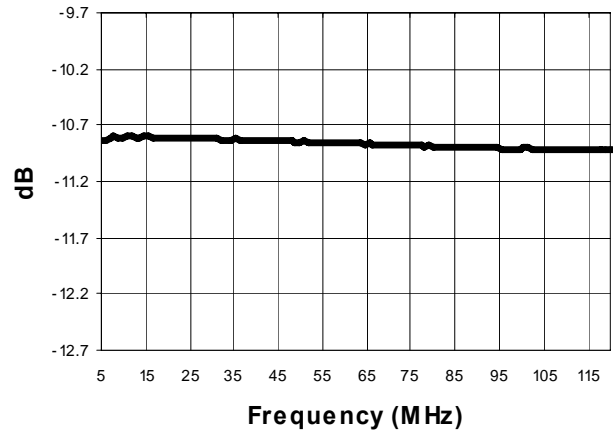
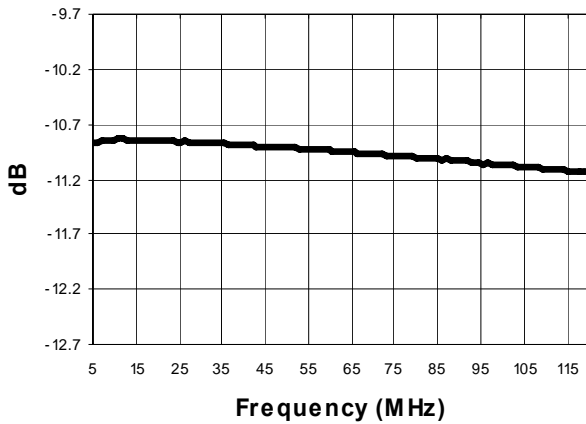


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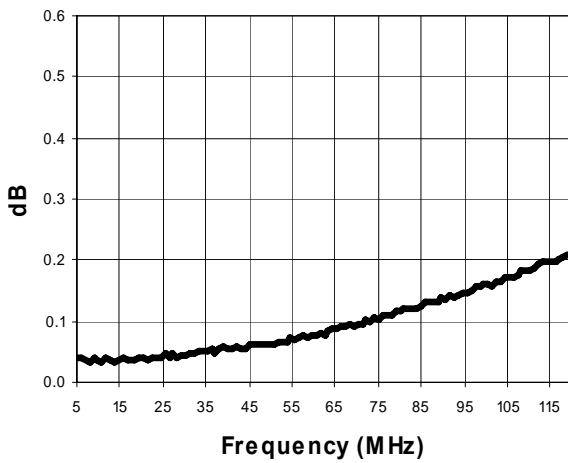
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Typical Performance Curves: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$ ¹

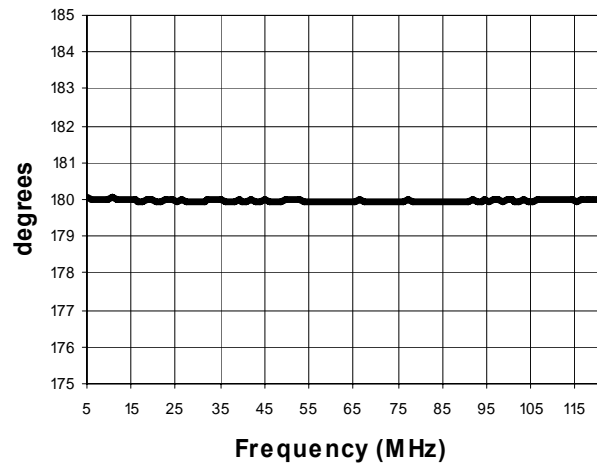
Insertion Loss: coupled (Pin5 - Pin1) ref value -10.7dB Insertion Loss: through (Pin3 - Pin3) ref value -10.7dB



Amplitude Unbalance



Phase Unbalance



Return Loss: Input

