

**4:1 Transmission Line Transformer
5-1000MHz**

**MABACT0066
V1P**

Features

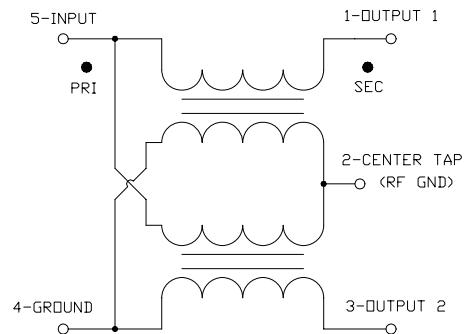
- Surface Mount
- 4:1 Impedance
- Excellent amplitude and phase balance
- Can be used in both 50Ω and 75Ω systems
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of MABAES0054
- Available on Tape and Reel. Reel quantity 2000

Description

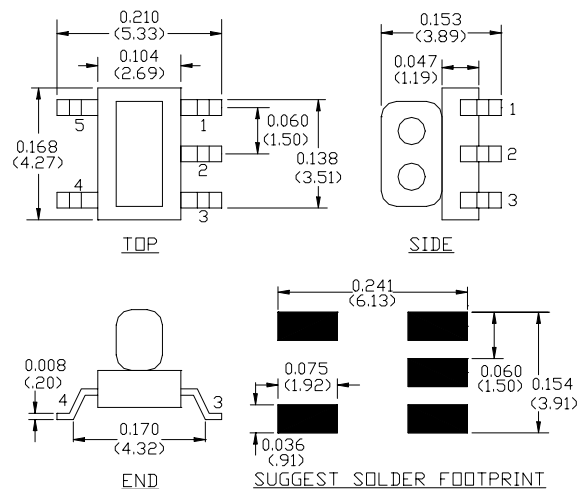
M/A Com's MABACT0066 is a 4:1 RF flux coupled step up transformer in a low cost, surface mount package. Ideally suited for high volume CATV/ Broadband applications.



Schematic



Case Style: SM-138



Pin Configuration

Pin No.	Function
1	Secondary Dot (output 1)
2	Centre Tap (ground)
3	Secondary (output 2)
4	Primary (Input)
5	Primary Dot (Ground)

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

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

Ordering Information

Part Number	Package
MABACT0066TR	2000 piece reel
MABA-007968-CT66TB	Customer Test Board

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

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

Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$

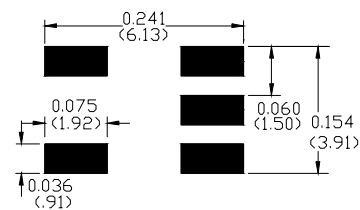
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss	5 - 50 MHz	dB	-	1.5	2.0
	50 - 879 MHz		-	1.0	1.5
	879 - 1000 MHz		-	1.5	2.0
Amplitude Unbalance (Nominal 0dB)	5 - 1000 MHz	dB	-	± 0.25	± 0.5
Phase Unbalance (Nominal 180°)	5 - 500 MHz	°	-	± 4.0	± 8.0
	500 - 1000 MHz	°	-	± 8.0	± 12.0

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum
Max Input Power	250mW
DC current	40mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

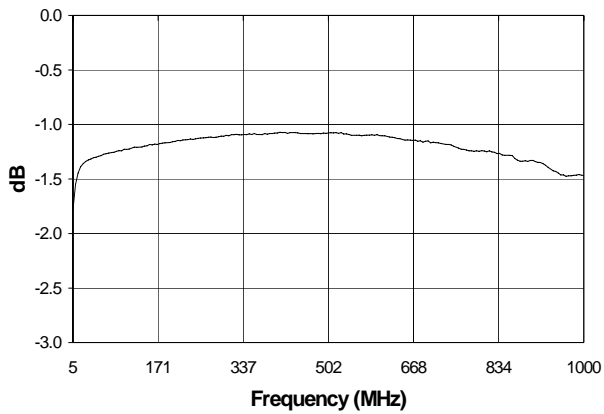
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

Recommended PCB Configuration

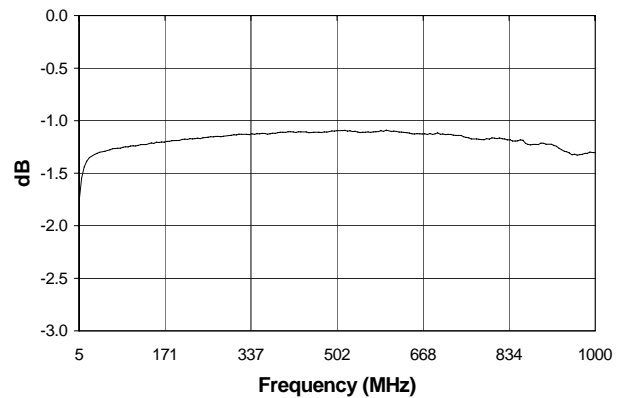


Typical Performance Curves: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$

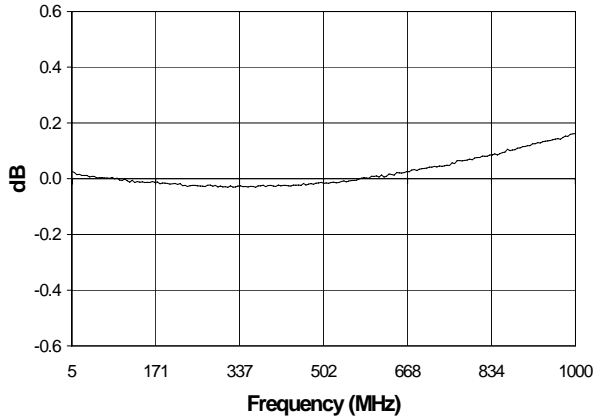
Insertion Loss 1 (through pin 4 to pin 1)



Insertion Loss 2 (coupled pin 4 to pin 3)



Amplitude Unbalance



Phase Balance

