

1:1 Flux Coupled Transformer 3 - 200 MHz

Rev. V4

Features

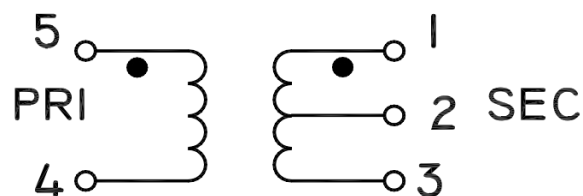
- Surface Mount
- 1:1 Impedance
- CT on Secondary
- Available on tape & reel
- RoHS* Compliant
- Pb free

Description

MABACT0012 is a 1:1 RF flux coupled transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



Functional Schematic



Pin Configuration

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

Ordering Information

Part Number	Package
MABACT0012	2000 piece reel

* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

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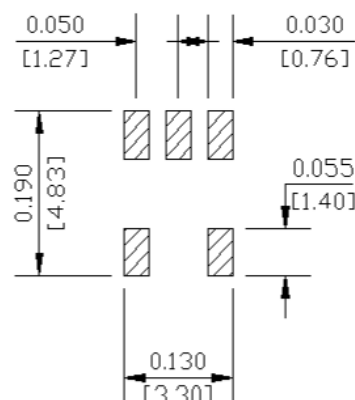
Electrical Specifications: Freq. = 3 - 200 MHz, $T_A = +25^\circ\text{C}$, $Z_0 = 75\ \Omega$

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Insertion Loss	3 - 200 MHz	dB	—	0.8	1.5
Amplitude Unbalance	3 - 50 MHz 3 - 200 MHz	dB	—	—	0.1 0.5
Phase Unbalance	3 - 50 MHz 50 - 200 MHz	°	—	—	1 5
Input Return Loss	3 - 200 MHz 5 - 120 MHz	dB	—	—	10 15

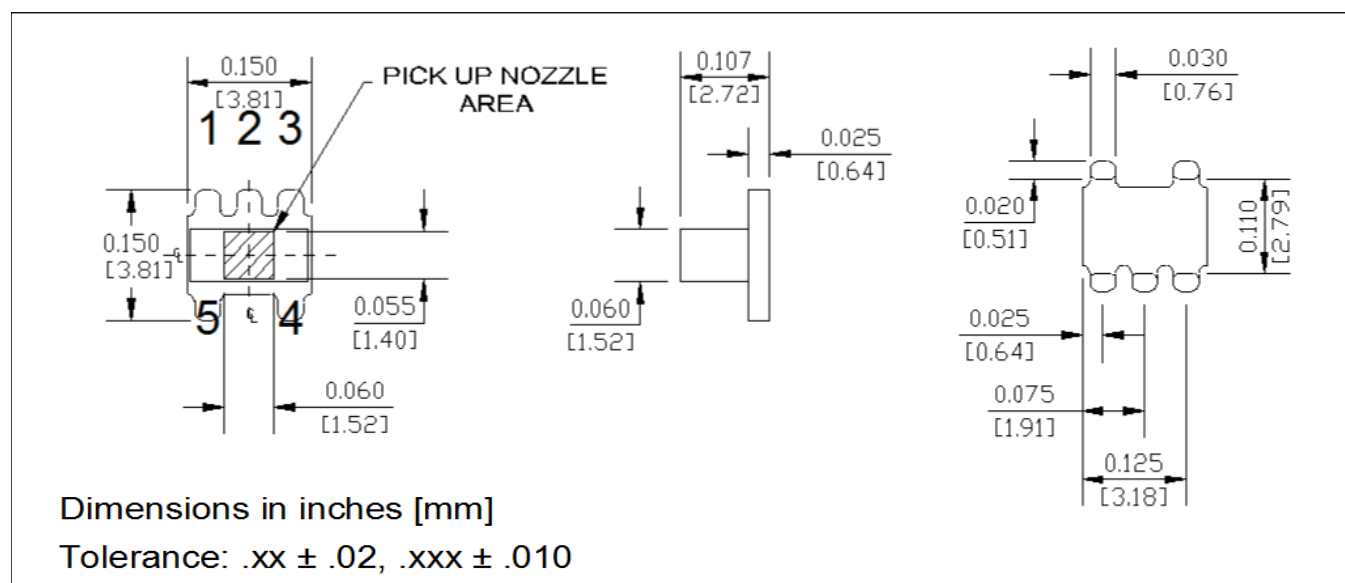
Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	250 mW
DC Current	30 mA
Operating Temperature	-40°C to $+85^\circ\text{C}$
Storage Temperature	-40°C to $+85^\circ\text{C}$

PCB Footprint



Outline Drawing

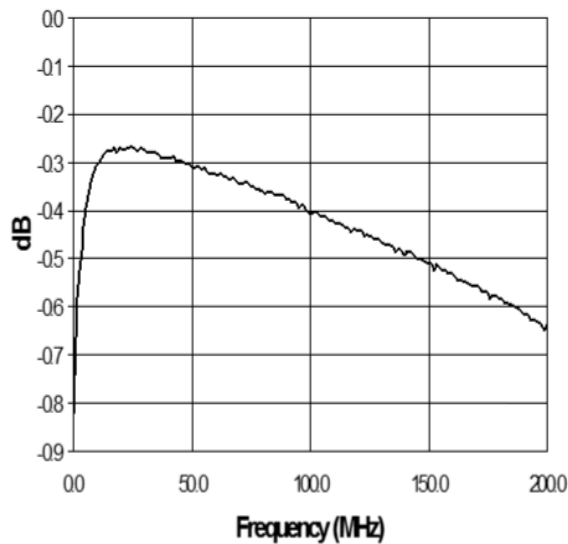


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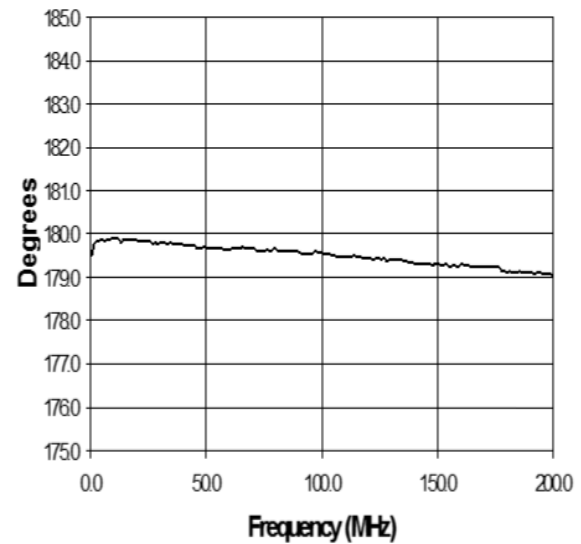
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Typical Performance Curves: $T_A = +25^\circ\text{C}$, $Z_0 = 75\ \Omega$

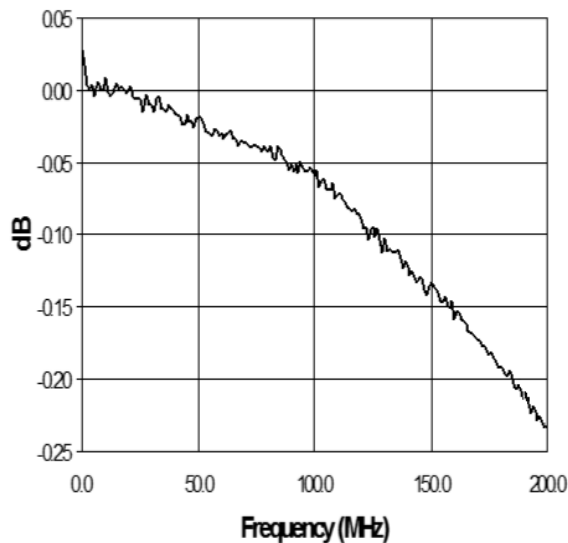
Insertion Loss Port



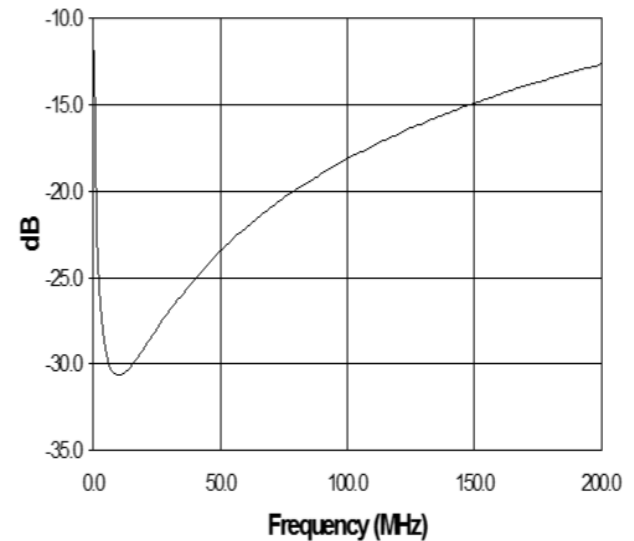
Phase Balance



Amplitude Unbalance



Input Return Loss



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