

Broadband CATV 4:1 Flux Coupled Transformer

MABACT0045 Preliminary V2P

Features

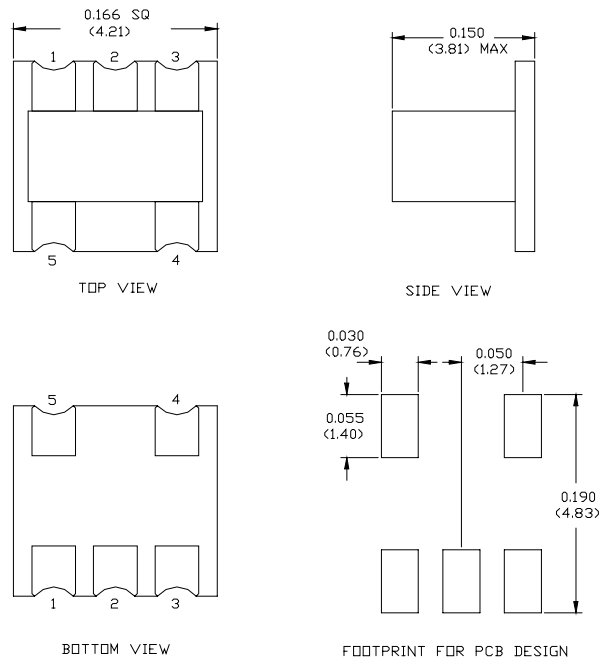
- SMT unit
- 4:1 impedance
- Available on tape & reel
- Excellent temperature stability

Description

M/A-COM's MABACT0045 is a low cost SMT 4:1 flux coupled transformer designed for high volume CATV Broadband applications. Suitable for use in 50 Ohm and 75 Ohm systems



SM-164 Case Style



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

Electrical Specifications @ 25°C, 75 Ohm

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range: 5-200 MHz					
Insertion Loss	5 - 65 MHz	dB	—	0.6	1.0
	65 - 200 MHz	dB	—	0.8	1.0
Amplitude Balance	50 - 200 MHz	dB	—	± 0.2	± 0.3
Phase Balance	5 - 65 MHz	°	—	± 0.1	± 2.0
	65 - 200 MHz	°	—	± 0.3	± 3.0
Input Return Loss	5 - 65 MHz	dB	15	25	—
	65 - 200 MHz	dB	12	17	—

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MABACT0045

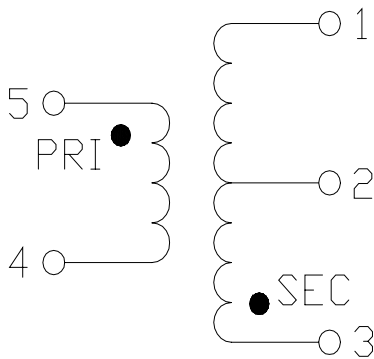
Pin Configuration

Function	Pin Number
Primary Dot (input)	5
Primary (ground)	4
Secondary Dot (o/p 1)	3
Secondary (o/p 2)	1
Center Tap (ground)	2

Absolute Maximum Ratings¹

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

Schematic



¹ Exceeding one or a combination of these settings may cause permanent damage to the unit

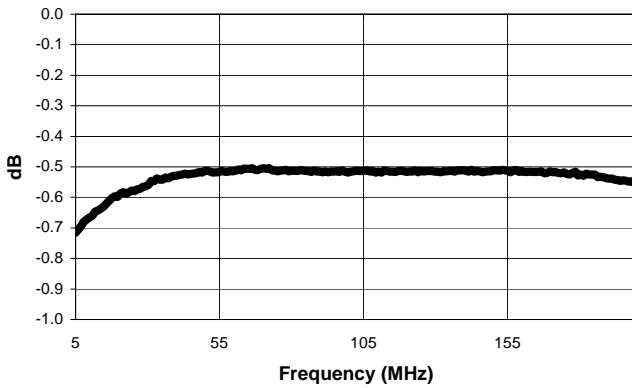
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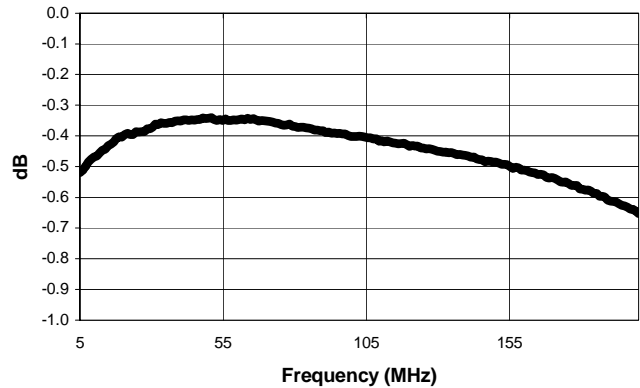
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Typical Performance Curves @ +25°C, 75 Ohm

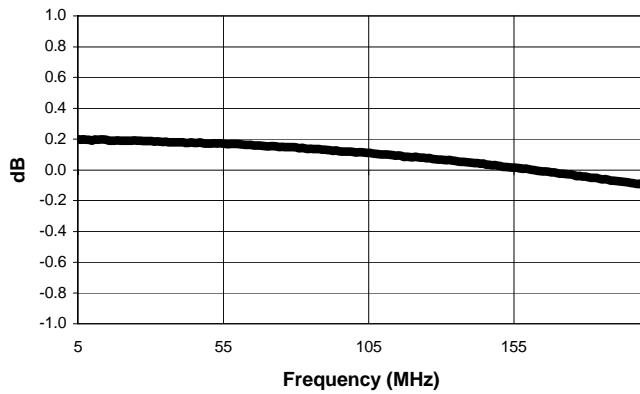
Insertion Loss 1: pin 5-3



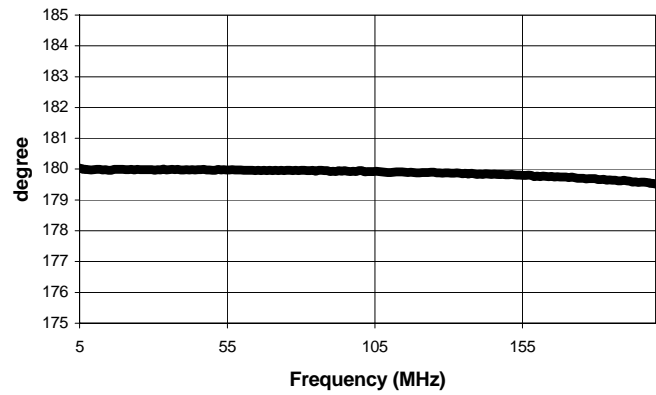
Insertion Loss 2: pin 5-1



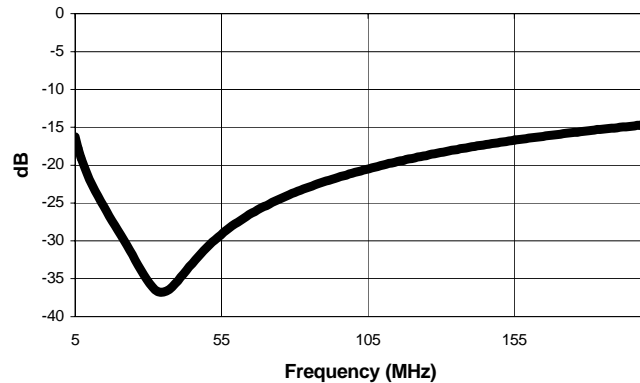
Amplitude Balance



Phase Balance



Input Return Loss



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