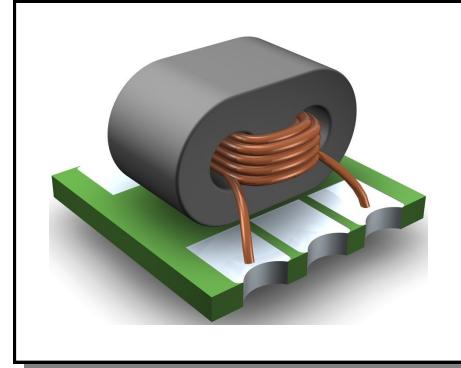


Features

- ♦ 1:1 flux coupled transformer
- ♦ Surface mount
- ♦ Centre Tap on Secondary
- ♦ 260°C reflow compatible
- ♦ RoHS Compliant
- ♦ Suitable for all CATV, Broadband applications.



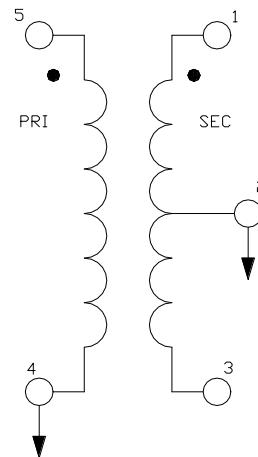
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{\text{in}} = 0\text{dBm}$

Parameter	Conditions	Units	Min	Typ	Max
Insertion Loss (pin 5-1)	3 - 5 MHz 5-200 MHz	dB	-	1.0	2.6
		dB	-	0.5	0.9
Insertion Loss (pin 5-3)	3 - 10 MHz 10-200 MHz	dB	-	1.0	2.6
		dB	-	0.4	0.75
Amplitude Balance	3 - 200 MHz	dB	-	0.1	± 0.3
Phase Balance	3 - 200 MHz	°	-	0.3	± 3.0
Input Return Loss	3 - 5 MHz 5 - 120 MHz 120 - 200 MHz	dB	5	13	-
		dB	19	27	-
		dB	15	21	-

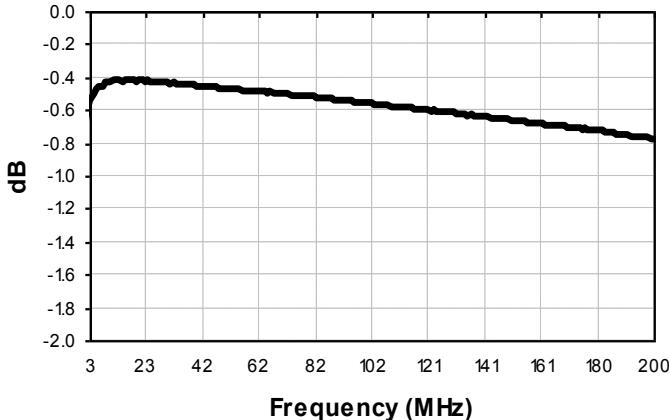
Pin Configuration

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

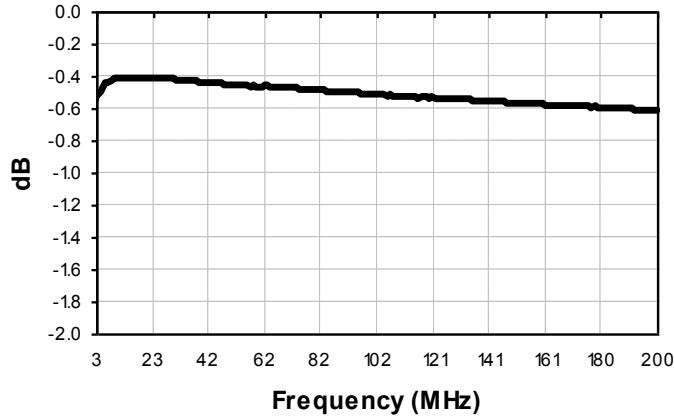
Schematic



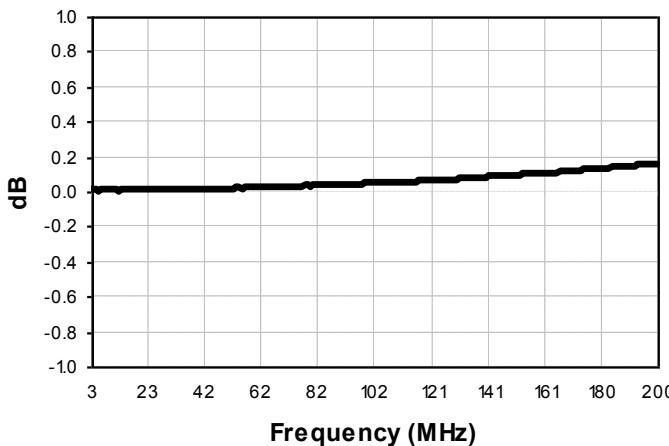
Insertion Loss: (pin5 - pin1)



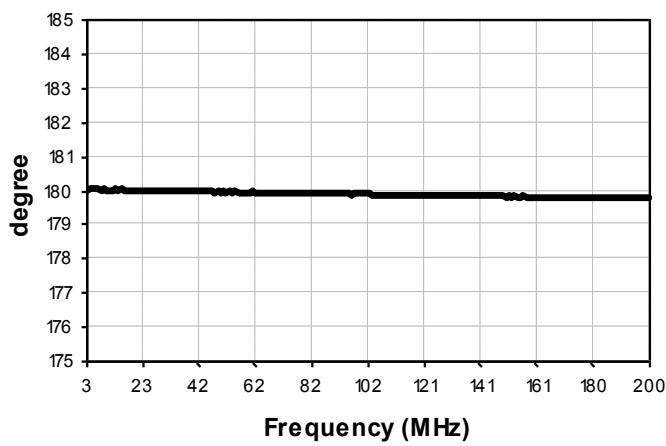
Insertion Loss: (pin5 - pin3)



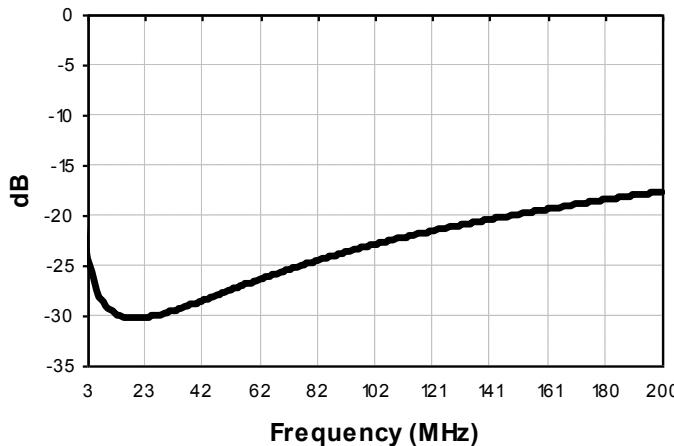
Amplitude Balance



Phase Balance

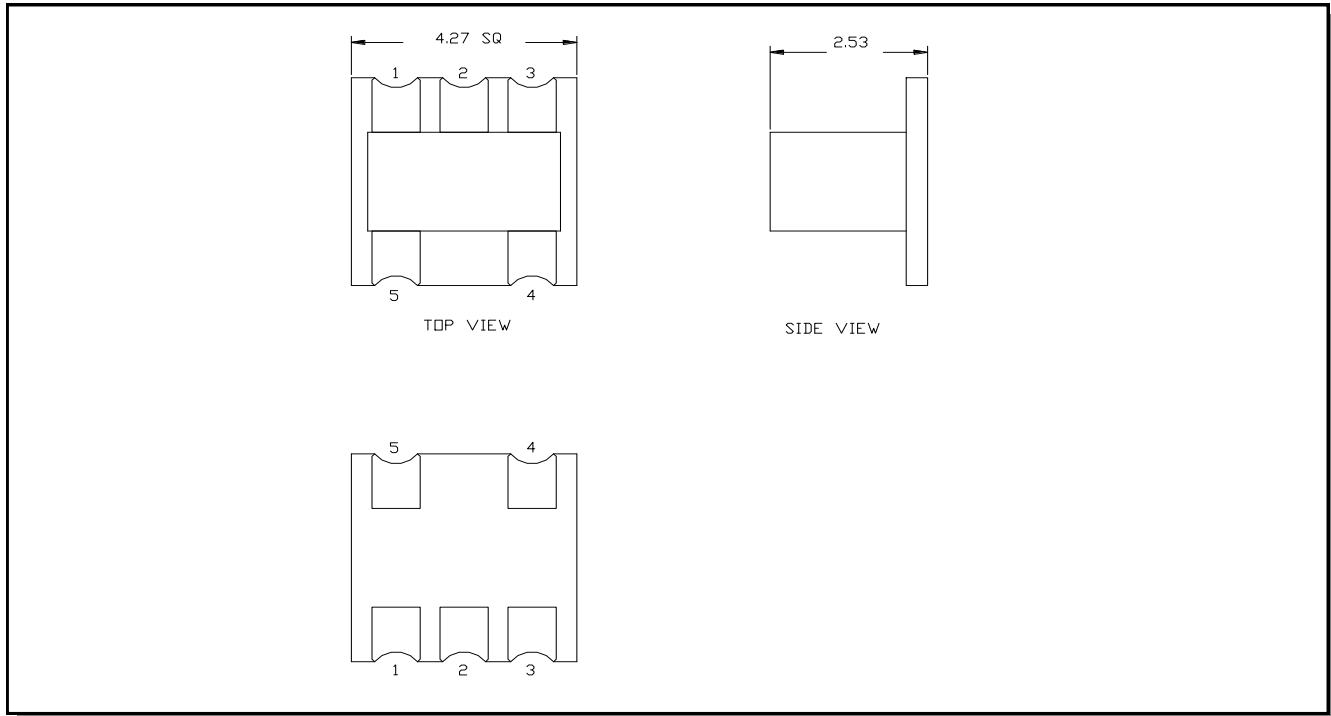


Return Loss: Input (pin5)



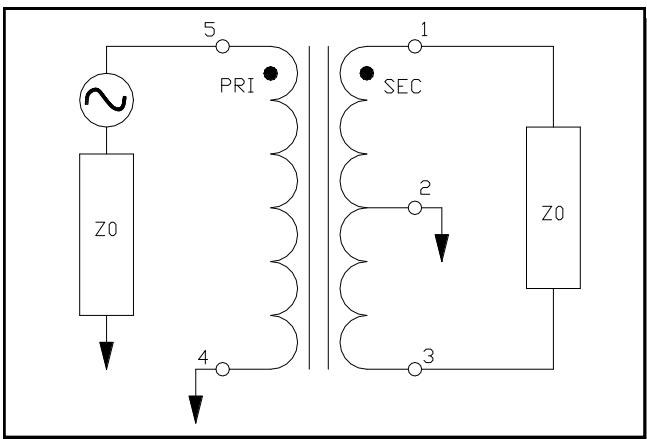
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

Outline Drawing

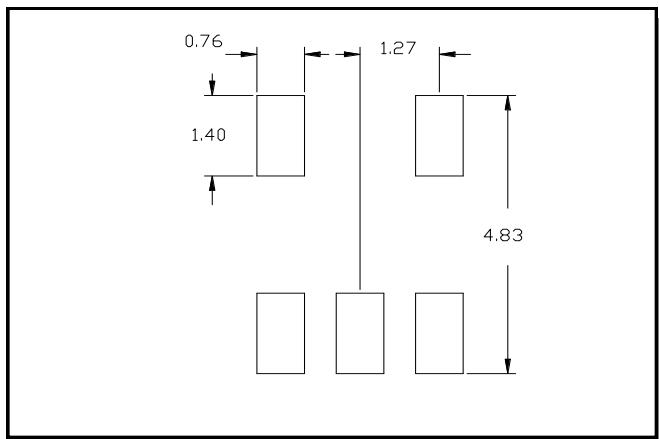


1. Dimensions in mm.
2. Tolerance: ± 0.2 mm unless otherwise noted.
3. Model number and lot code printed on reel.
4. Plating finish: Electreless nickel immersion Gold 3 - 5 microns nickel 0.05 - 0.15 microns gold.

Application Circuit



Recommended Footprint



Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width (W)	mm	12.0
Pitch (P ₁)	mm	8.0
A ₀	mm	4.50
B ₀	mm	4.50
K ₀	mm	2.73
Orientation	-	F5
Reference Application note ANI-019 for orientation		

Ordering Information

Part Number	Description
MABACT0071	Tape & Reel
MABA-008350-CT71TB	Customer Evaluation Board

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		240
Operating Temperature Range	°C	-40	+85
Storage Temperature Range	°C	-55	+100

Temperature data available on request

ECO History

Rev	Date	Description	ECO
V1	26 Jul 2005	New release	20047786
V2	03 Nov 2010	Change start Frequency from 0.3 to 3 MHz	20101811
V3	09/12/2011	Update part orientation.	CO-002862