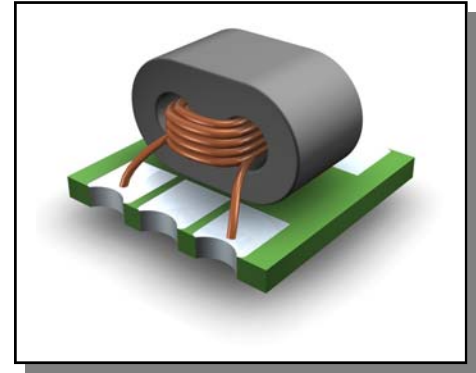


Transformer, 1:2
5 MHz - 1000 MHz

Rev. V1

Features

- ◆ 1:2 impedance ratio
- ◆ Surface mount
- ◆ Available on tape and reel
- ◆ 260°C reflow compatible
- ◆ RoHS Compliant and Pb free
- ◆ Excellent temperature stability
- ◆ Can be used on 50Ω and 75Ω systems
- ◆ Suitable for all CATV, Broadband and FTTx applications.



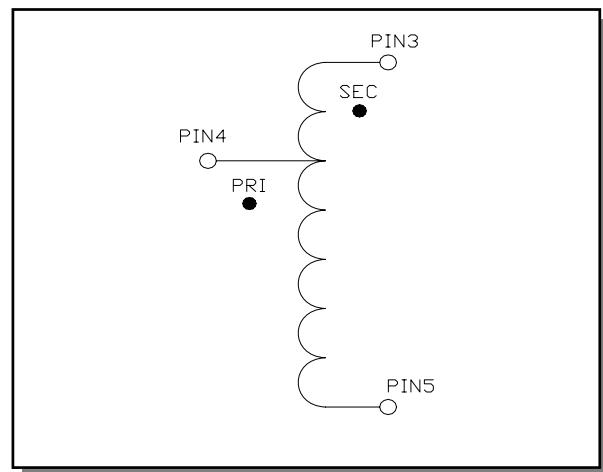
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	5		1000
Impedance		Ω		75	
Impedance Ratio				1:2	
Insertion Loss	5 - 600 MHz	dB	-	0.6	0.8
	600 - 1000 MHz	dB	-	1.1	1.3
Input Return Loss	5 - 200 MHz	dB	20	23	-
	200 - 500 MHz	dB	12	14	-
	500 - 1000 MHz	dB	8	11	-

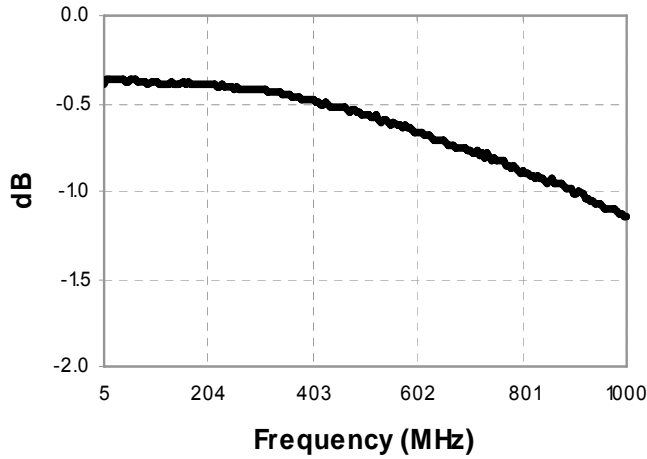
Pin Configuration

Pin No.	Function
1	Not used (ground)
2	Not used (ground)
3	Secondary Dot
4	Primary Dot
5	Primary and Secondary

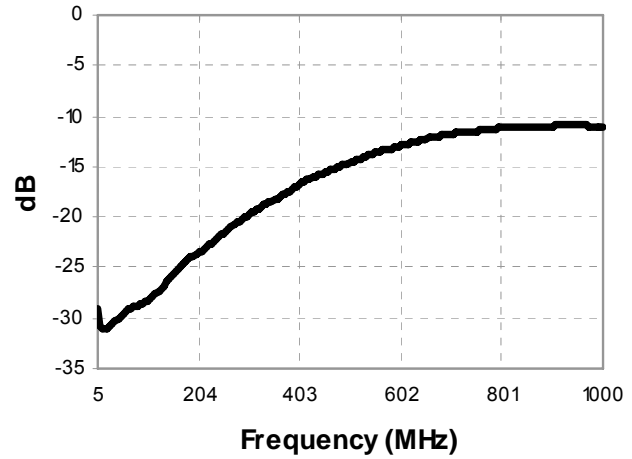
Schematic



Insertion Loss 1: (Pin4 - Pin3)

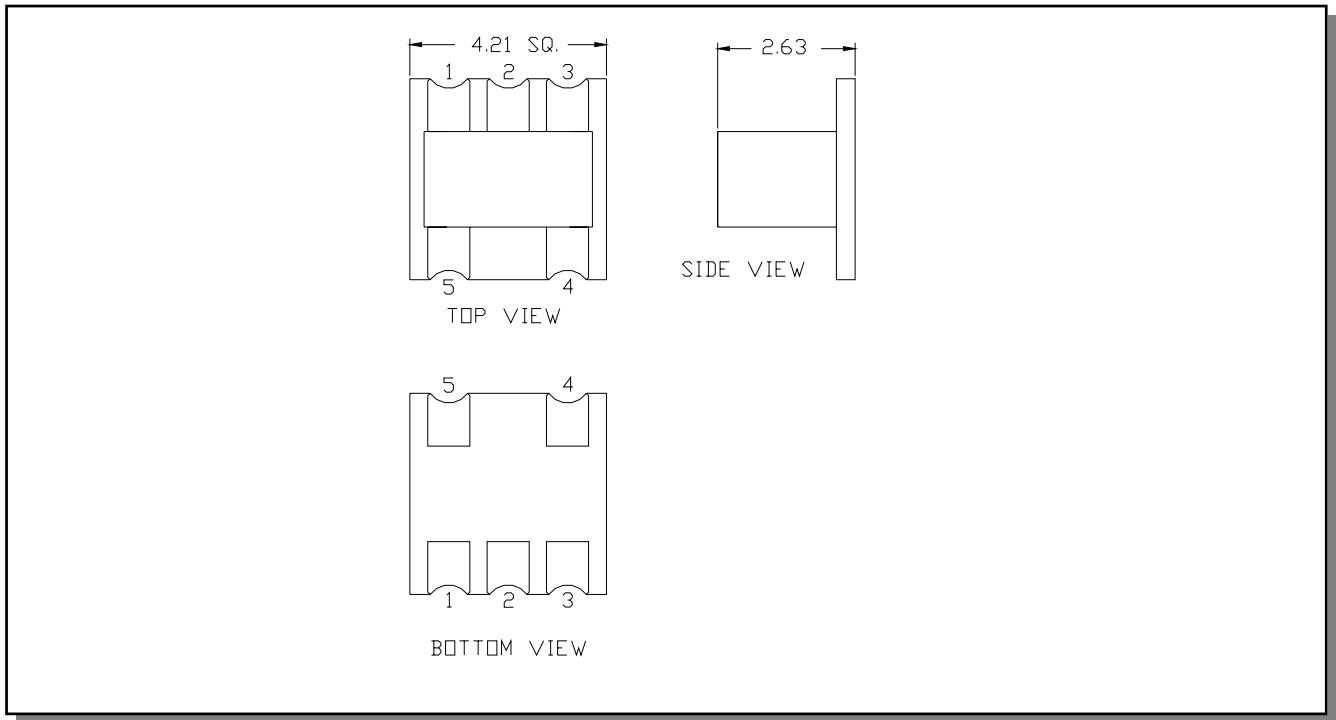


Return Loss: Input (Pin4)



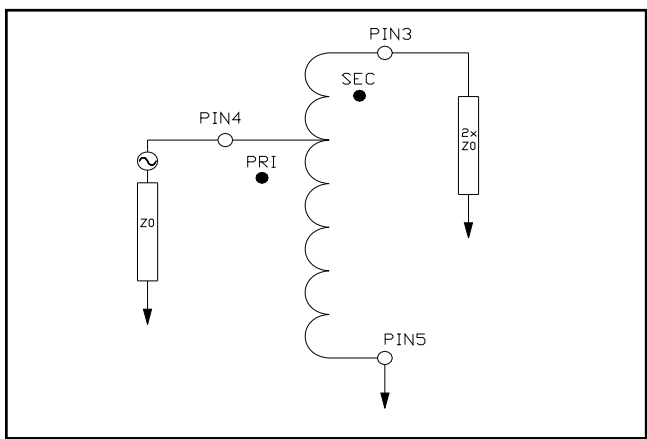
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

Outline Drawing

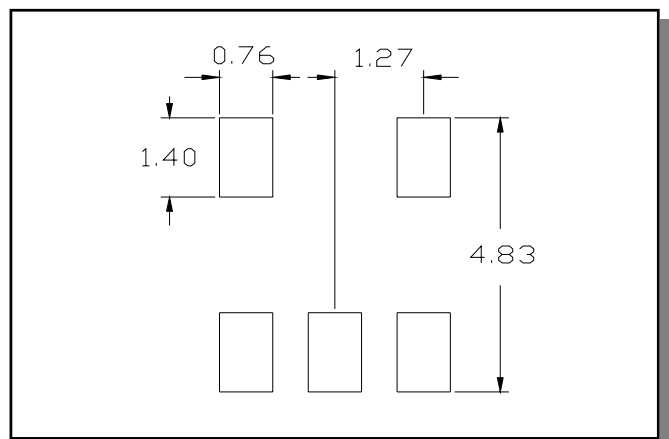


1. Dimensions in mm.
2. Tolerance: $\pm 0.2\text{mm}$ unless otherwise noted.
3. Model number and lot code printed on reel.
4. Plating finish: ENIG on both sides, 0.05 to 0.1 μm gold over 3 to 6 μm nickel

Application Circuit



Recommended Footprint



MABA-010449-CA2A40



Transformer, 1:2
5 MHz - 1000 MHz

Rev. V1

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	4.5
B ₀	mm	4.5
K ₀	mm	2.73
Orientation	-	F-31
Reference Application Note ANI-019 for orientation		

Ordering Information

Part Number	Description
MABA-010449-CA2A40	Tape & Reel
MABA-010449-CA2ATB	Customer Evaluation Board

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		200
Operating Temperature Range	°C	-40	+85
Storage Temperature Range	°C	-55	+125

Temperature data available on request

ECO History

Rev	Date	Description	ECO
V1	12-Oct-2010	Datasheet released on Matrix	20101588