MABA-011039

1:4 Step up Flux Coupled Balun Transformer
1 - 300 MHz

Rev. V2

Features

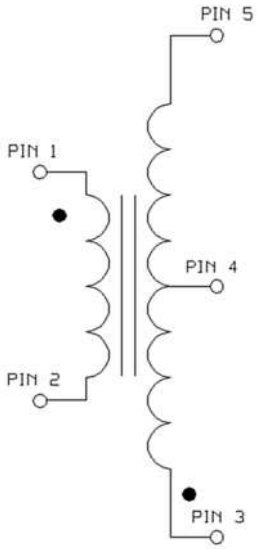
- Surface Mount
- 1:4 Impedance
- RoHS Compliant and Lead free
- 260°C Reflow Compatible
- Excellent temperature stability
- Available on Tape and Reel
- Suitable for all CATV, Broadband and FTTX applications.



Description

MABA-011039 is a 1:4 flux coupled transmission. This transformer is ideally suited for CATV and Broadband applications.

Functional Schematic



Ordering Information

Part Number	Package
MABA-011039	Tape & Reel
MABA-011039-TB	Customer Test Board

Pin Configuration

Pin No.	Function
1	Primary Dot (input)
2	Primary (ground)
3	Secondary (output2)
4	Centre Tap (ground)
5	Secondary Dot (output1)

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1:4 Step up Flux Coupled Balun Transformer
1 - 300 MHz

Electrical Specifications: T_A = 25°C, Z_0 = 75 Ω, P_{in} = 0dBm

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range	-	MHz	1		300
Impedance	-	Ω	-	75	-
Impedance Ratio	-	-	-	1:4	-
Insertion Loss 1 (Pin1 - Pin5)	1 - 300 MHz	dB	-	0.7	1.1
Insertion Loss 2 (Pin1 - Pin3)	1 - 300 MHz	dB	-	0.6	1.1
Amplitude Balance	1 - 300 MHz	dB	-	0.05	±0.5
Phase Balance	1 - 300 MHz	°	-	0.2	±3.0
Input Return Loss (Pin1)	1 - 300 MHz	dB	14	21	-

Recommended Maximum Ratings

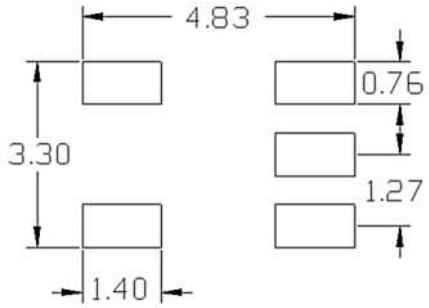
Parameter	Units	Min	Max
Input RF Power	MW	-	2000
DC Current	mA	-	1500
Operating Temperature Range	ºC	-40	+125

Full temperature plots available on request

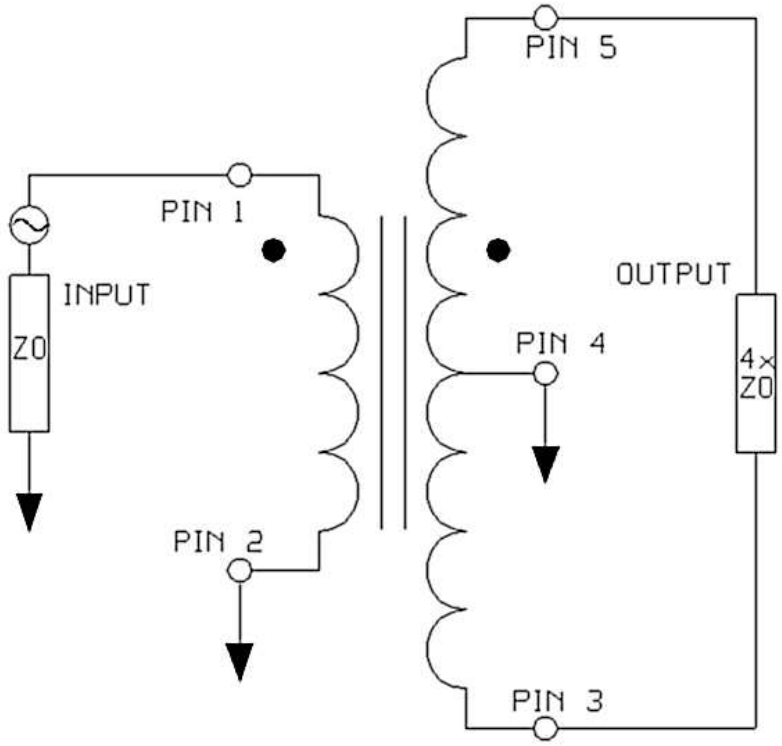
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PCB layout



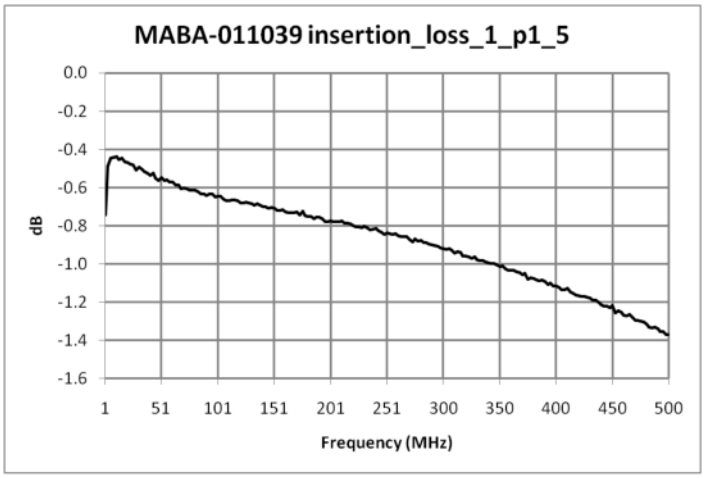
Application Schematic

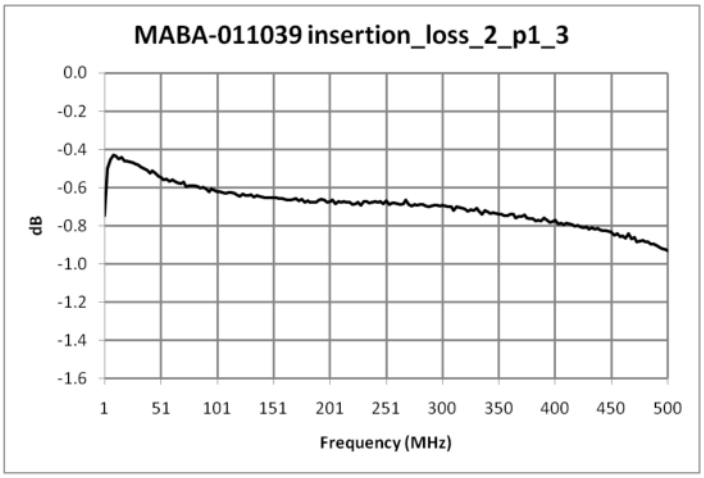


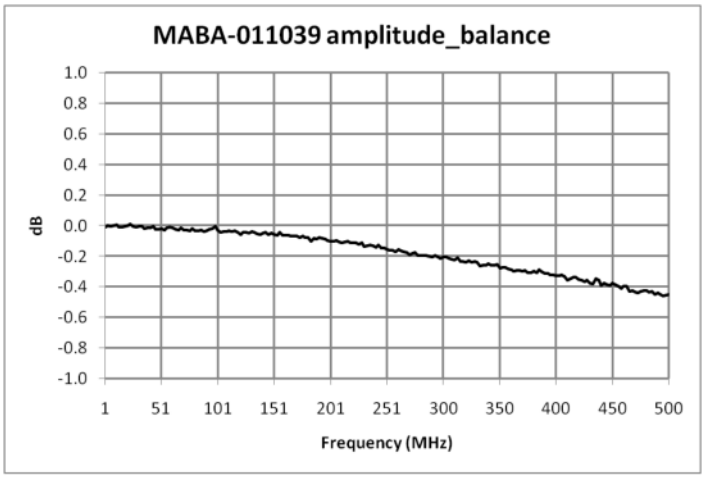
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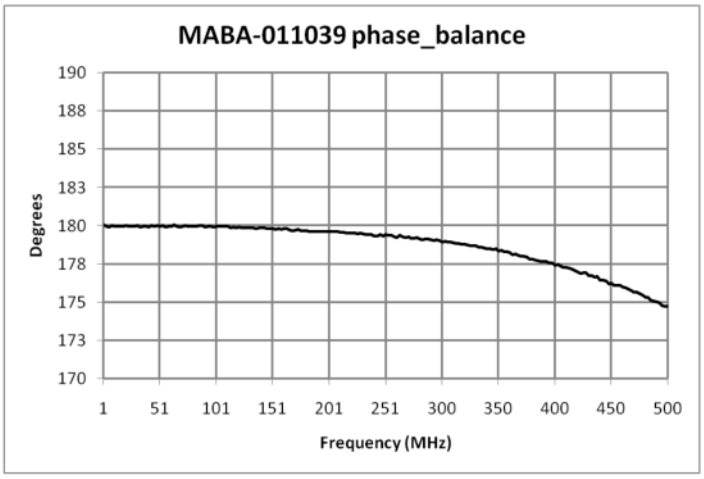
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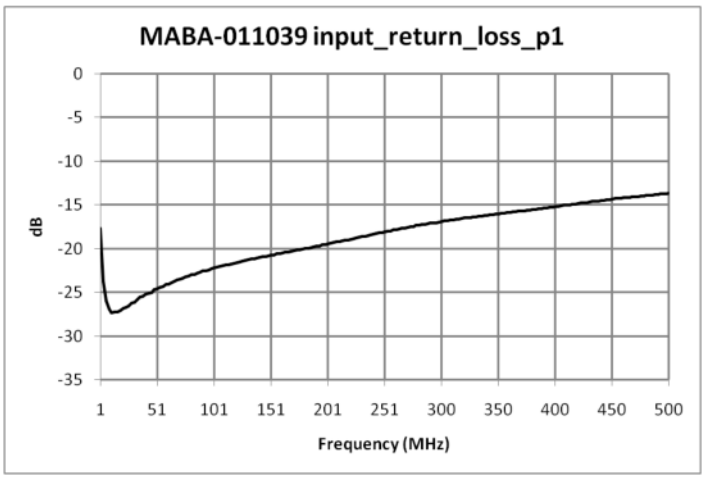
Typical Performance Curves

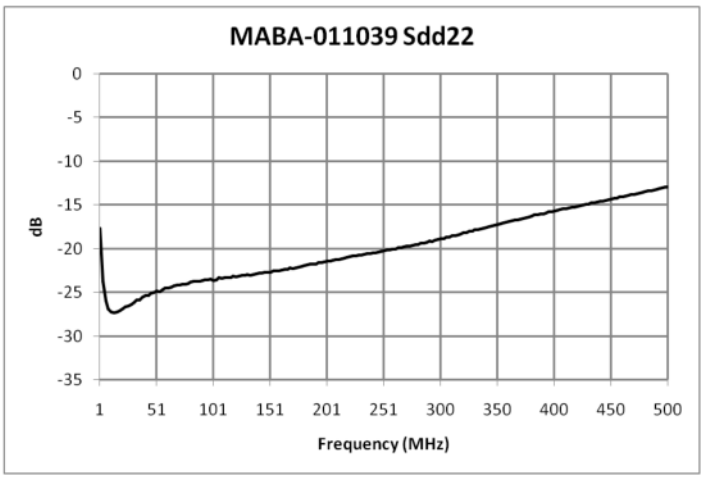










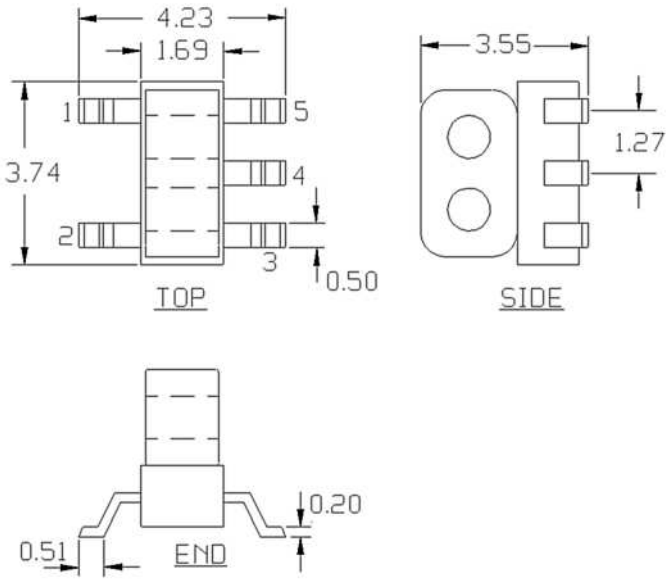


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Outline Drawing

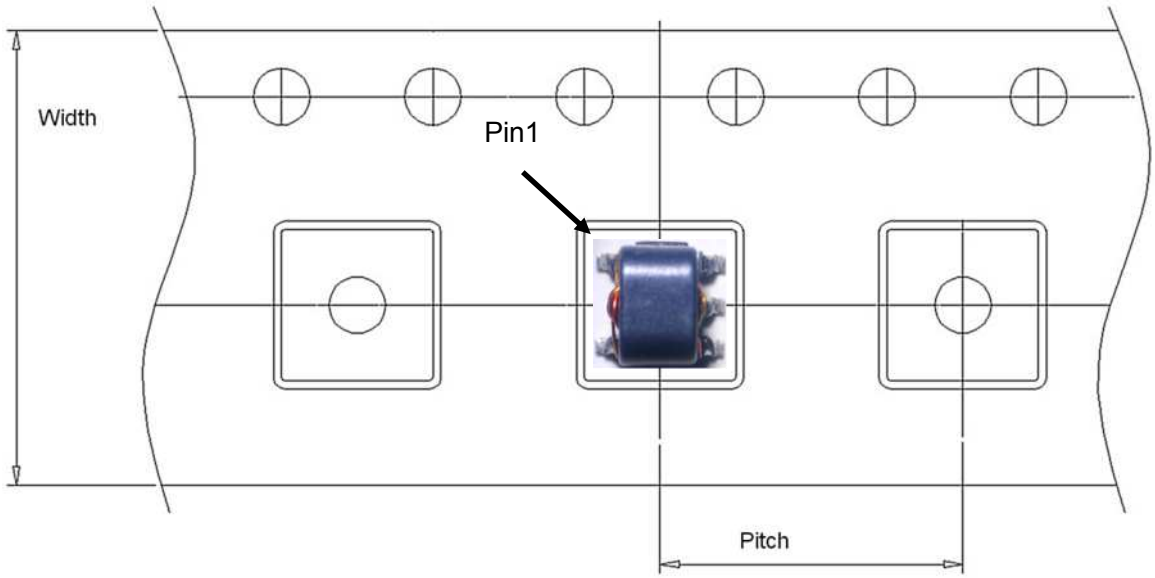


Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Ao	mm	4.40
Bo	mm	4.00
Ko	mm	3.90
Orientation	-	F26
Reference Application Note ANI-019 for orientation		

1. Dimensions in mm.
2. Tolerance: ±0.2mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Lead plating: (CuSn6) Lead Finish SAC-305.

Carrier Tape Orientation



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