

# MABA-011009

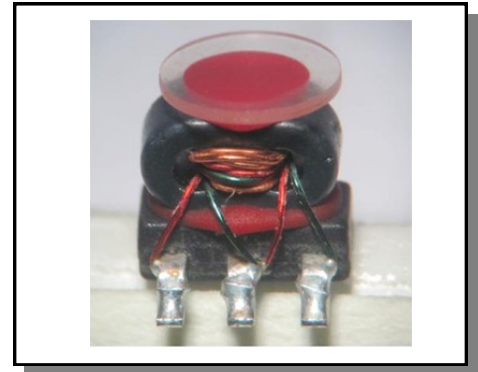


Transformer, 1:1  
3 MHz - 200 MHz

Rev. V2

## Features

- ◆ 1:1 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.



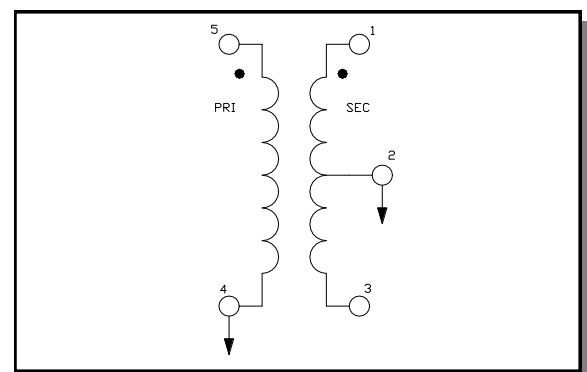
**Electrical Specifications:**  $Z_0 = 75\Omega$ ,  $T_A = 25^\circ\text{C}$ ,  $P_{in} = 0\text{dBm}$

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	3		200
Impedance		$\Omega$		75	
Impedance Ratio				1:1	
Insertion Loss Pin 5 - Pin1	3 - 85 MHz	dB	-	0.4	0.6
	85 - 150 MHz	dB	-	0.6	0.8
	150 - 200 MHz	dB	-	0.7	1.0
Insertion Loss Pin 5 - Pin3	3 - 85 MHz	dB	-	0.4	0.6
	85 - 200 MHz	dB	-	0.6	0.8
Amplitude Balance	3 - 200 MHz	dB	-	0.1	$\pm 0.35$
Phase Balance	3 - 85 MHz	degree	-	0.6	$\pm 2.0$
	85 - 200 MHz	degree	-	1.2	$\pm 4.0$
Input Return Loss	3 - 85 MHz	dB	20	24	-
	85 - 150 MHz	dB	16	20	-
	150 - 200 MHz	dB	14	18	-

## Pin Configuration

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

## Schematic



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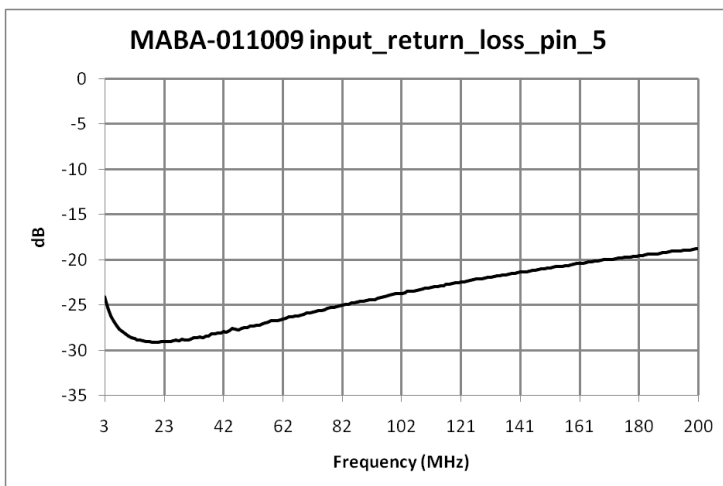
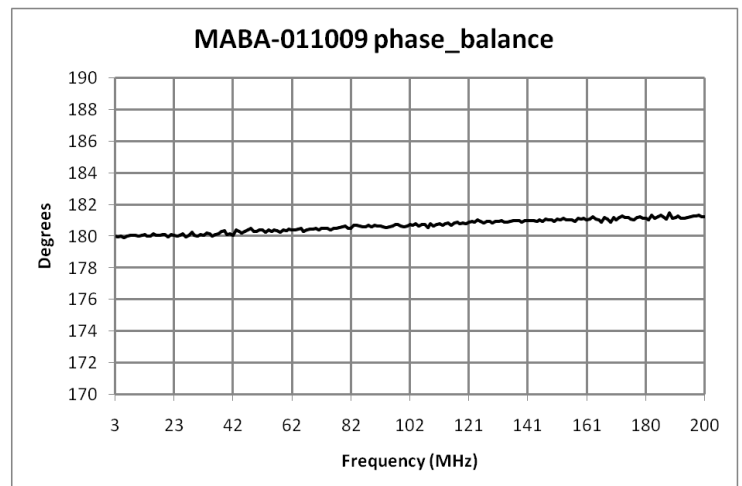
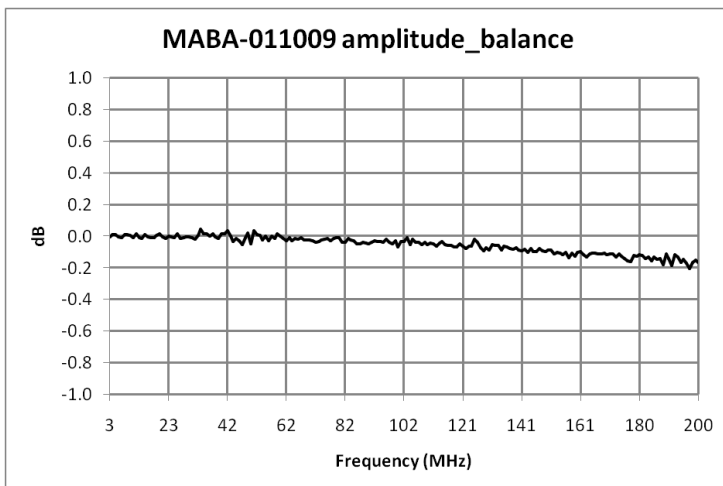
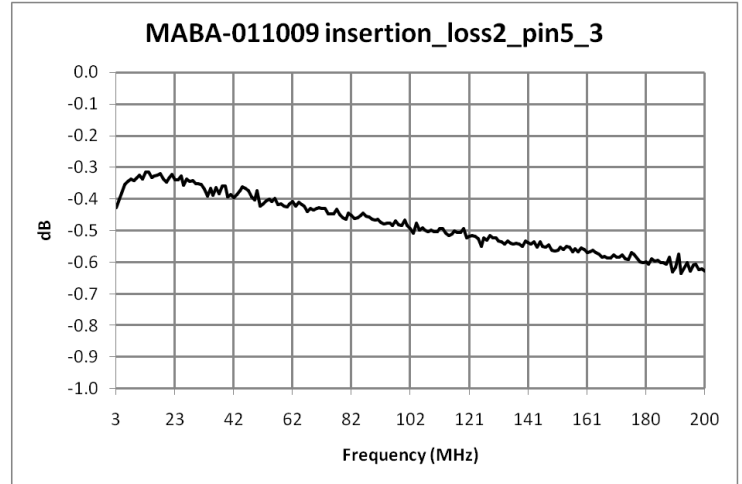
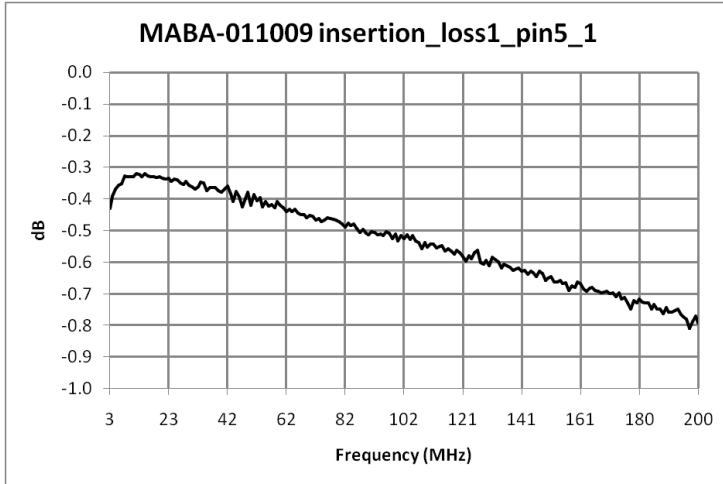
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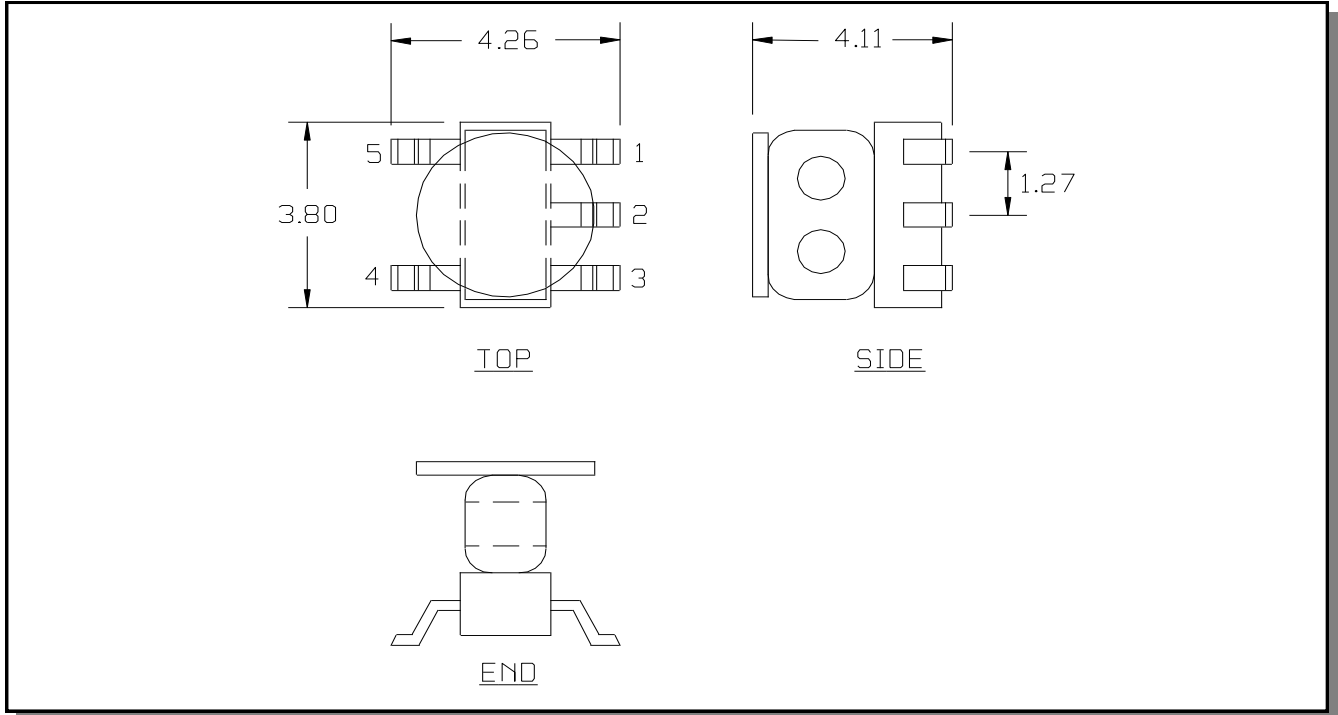
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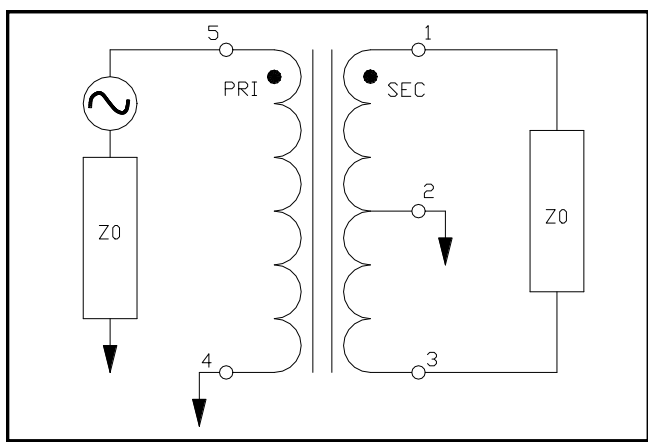
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## Outline Drawing

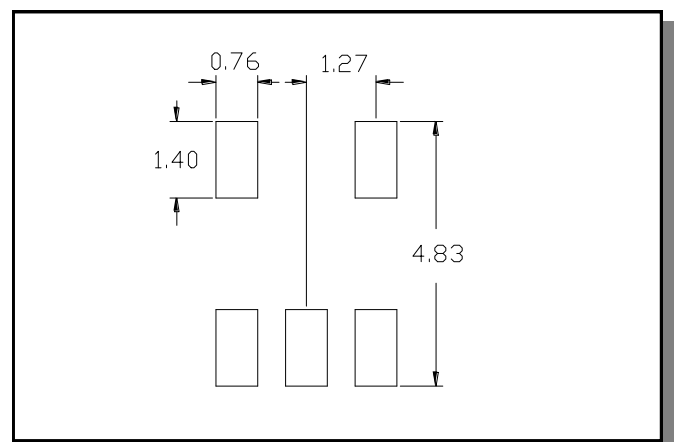


1. Dimensions in mm.
2. Tolerance:  $\pm 0.2\text{mm}$  unless otherwise noted.
3. Model number and lot code printed on reel.
4. Plating finish: CuSn6

## Application Circuit



## Recommended Footprint



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## Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width (W)	mm	12.00
Pitch (P <sub>1</sub> )	mm	8.00
A <sub>0</sub>	mm	4.50
B <sub>0</sub>	mm	4.00
K <sub>0</sub>	mm	4.40
Orientation	-	F26
Reference Application note ANI-019 for orientation		

## Ordering Information

Part Number	Description
MABA-011009	Tape & Reel
MABA-011009-TB	Customer Evaluation Board

## Recommended Maximum Ratings

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

Temperature data available on request