

1:1 Transmission Line Transformer 4.5 - 3000 MHz

V2

Features

- Surface mount
- Wide frequency range
- 1:1 impedance
- 260°C reflow compatible
- RoHS Compliant, lead-free
- Excellent temperature stability
- Available on tape and reel



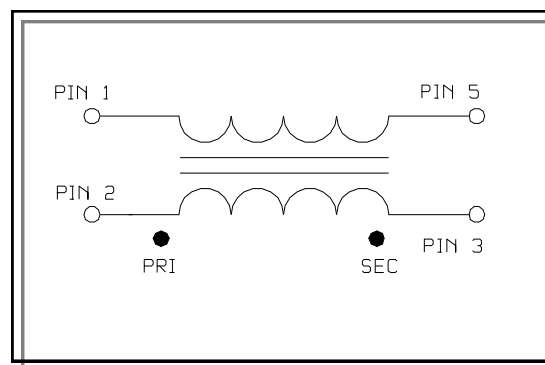
Electrical Specifications: $Z_0 = 50\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

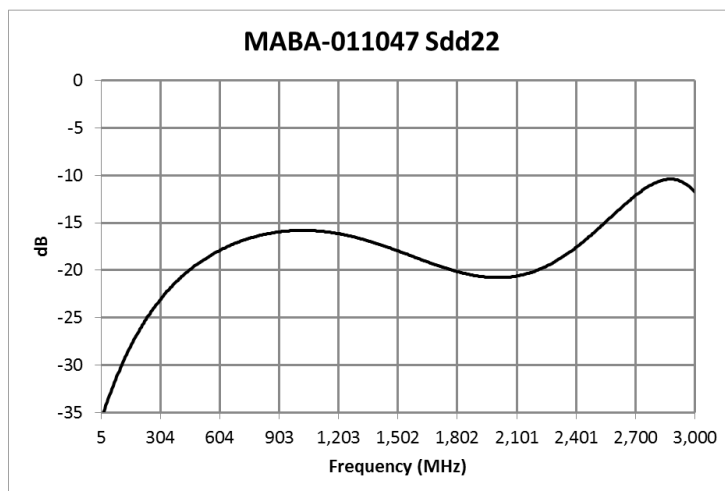
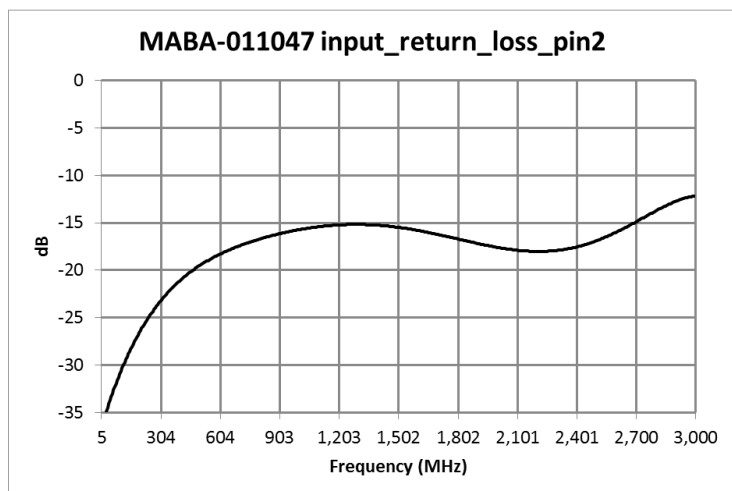
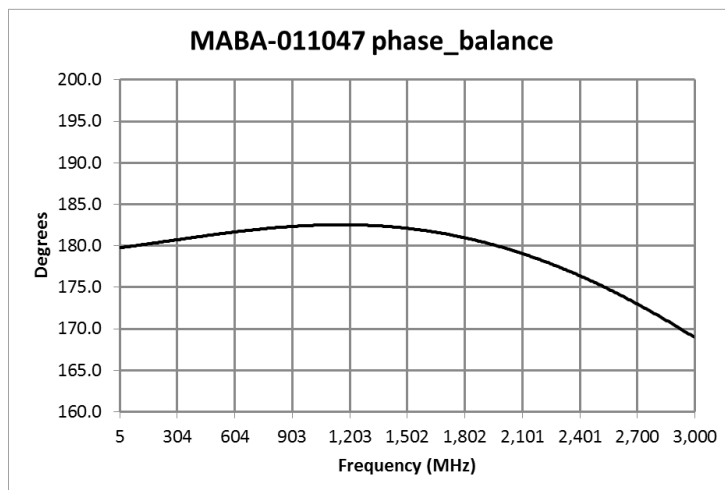
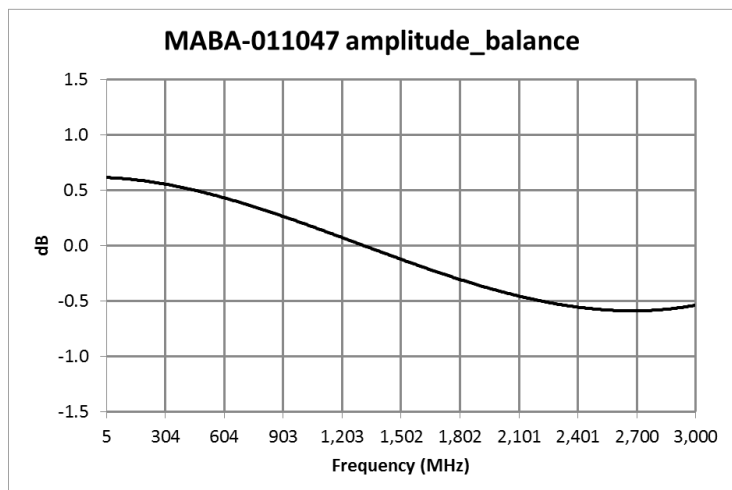
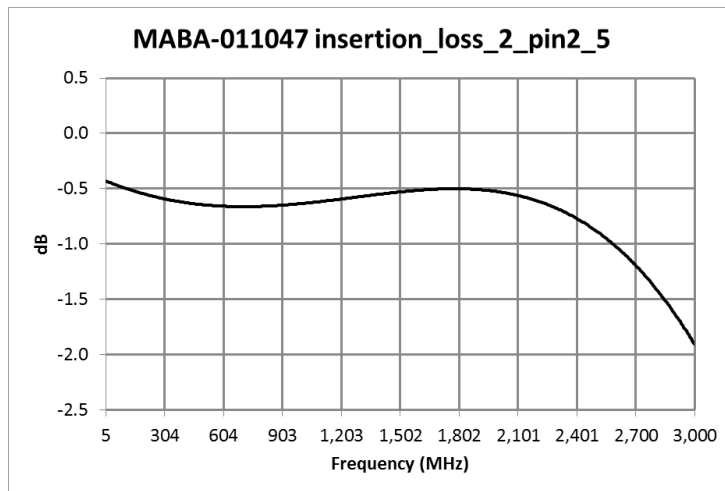
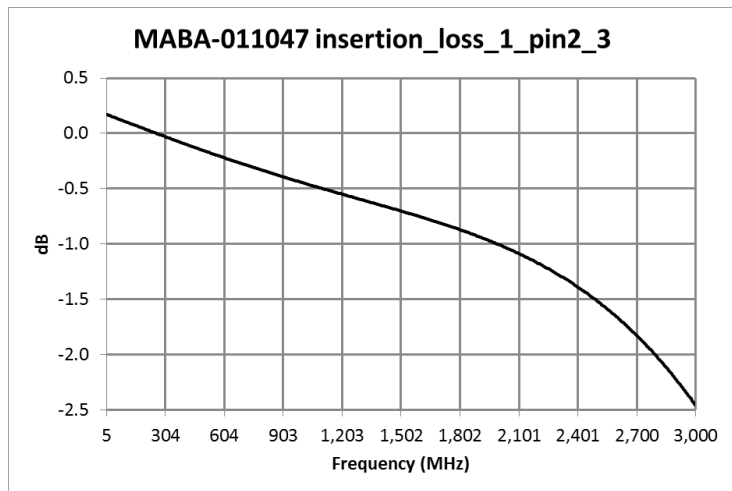
Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	4.5		3000
Impedance		Ω		50	
Impedance Ratio				1:1	
Insertion Loss 1 (Pin2 - Pin3)	4.5 - 1000	dB	-	0.1	1.0
	1001 - 2000	dB	-	0.7	2.0
	2001 - 3000	dB	-	1.5	-
Insertion Loss 2 (Pin2 - Pin5)	4.5 - 1000	dB	-	0.6	1.0
	1001 - 2000	dB	-	0.5	2.0
	2001 - 3000	dB	-	1.0	-
Amplitude Balance	4.5 - 1800	dB	-	0.2	1.0
	1801 - 3000	dB	-	0.6	1.5
Phase Balance	4.5 - 2800	Degrees	-	2.5	20
	2801 - 3000	Degrees	-	11.0	25

Pin Configuration

Pin No.	Function
1	Primary
2	Primary Dot
3	Secondary Dot
4	Not Connected
5	Secondary

Schematic



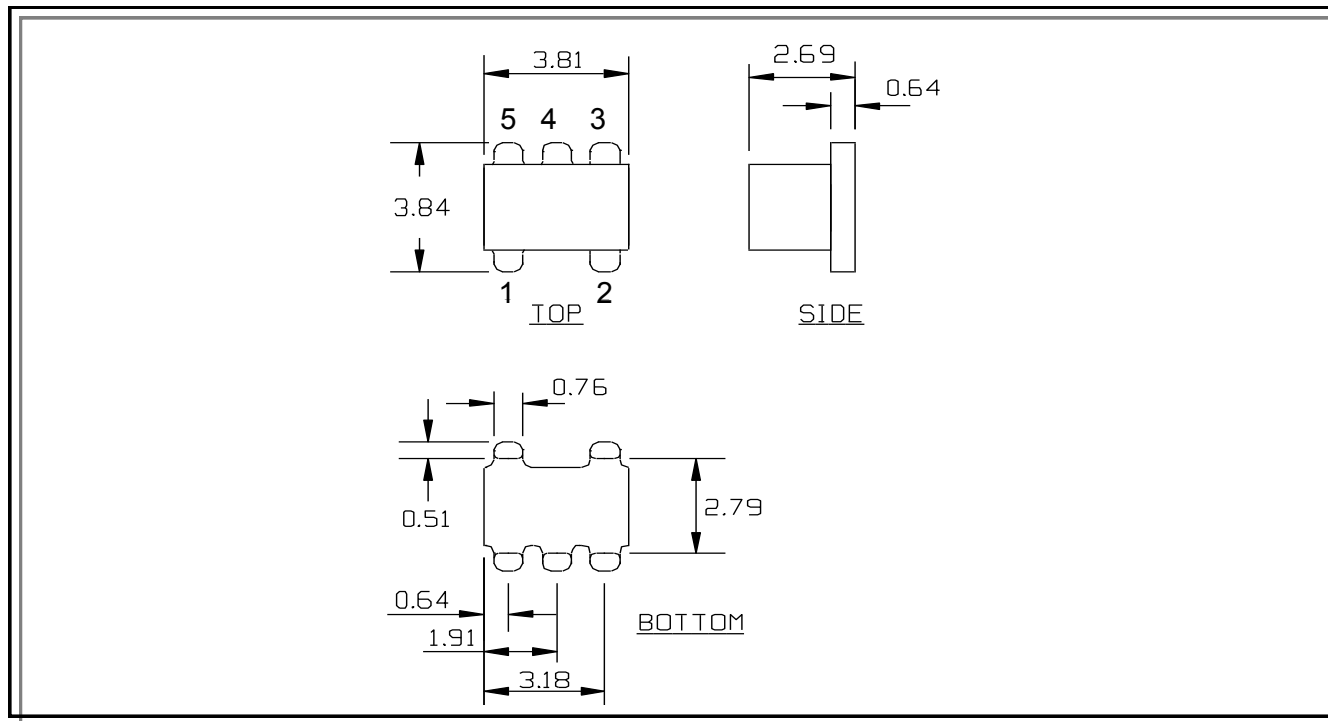


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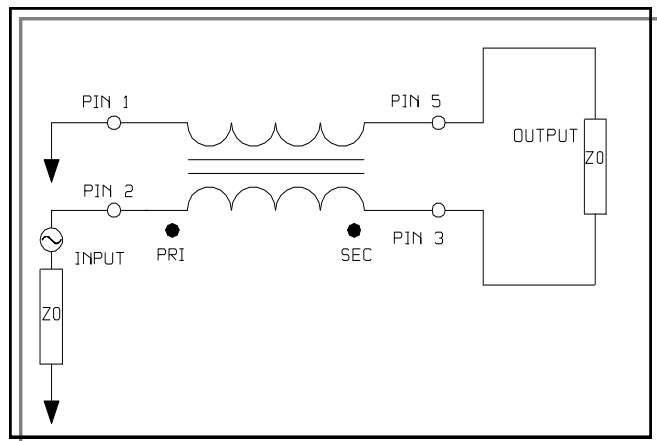
V2

Outline Drawing

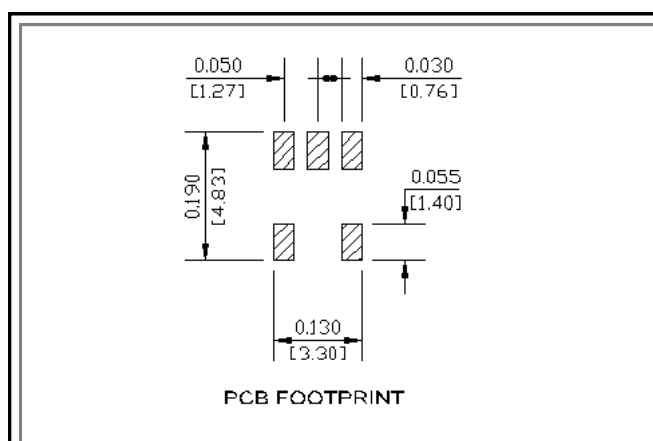


1. Dimensions in mm.
2. Tolerance: $\pm 0.2\text{mm}$ unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Finish: Electroless nickel immersion gold (ENIG)

Application circuit



Recommended Footprint



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	4.00
Bo	mm	4.00
Ko	mm	2.90
Orientation	-	F5
Reference Application Note ANI-019 for orientation		

Ordering Information

Part Number	Description
MABA-011047	Tape & Reel
MABA-011047-TB	Customer Test Board

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		30
Operating Temperature Range	°C	-40	+85

Full temperature plots available on request

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