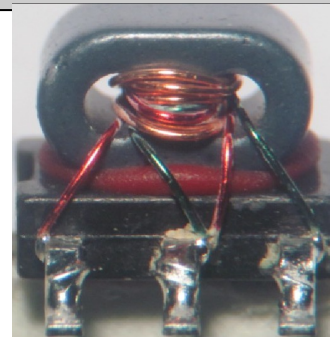


Transformer, 2:1 Flux Coupled Transformer 5MHz - 85 MHz

Rev. V3

Features

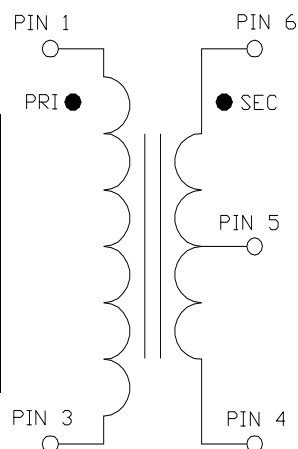
- Surface mount
- 2:1 Impedance ratio
- Centre tap on secondary
- Suitable for DOCSIS 3.0
- RoHS compliant
- Available on tape and reel



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		85
Impedance		Ω		75	
Impedance Ratio				2:1	
Insertion Loss (Pin1 - Pin6)	5 - 50 MHz	dB	-	0.4	0.6
	50 - 85 MHz	dB	-	0.5	0.7
Insertion Loss (Pin1 - Pin4)	5 - 50 MHz	dB	-	0.4	0.6
	50 - 85 MHz	dB	-	0.5	0.7
Amplitude Balance	5 - 50 MHz	dB	-	0.02	± 0.2
	50 - 85 MHz	dB	-	0.04	± 0.3
Phase Balance	5 - 50 MHz	$^\circ$	-	0.1	± 2.0
	50 - 85 MHz	$^\circ$	-	0.3	± 3.0
Input Return Loss (Pin1)	5 - 45 MHz	dB	20	25	-
	45 - 85 MHz	dB	15	19	-

Schematic



Pin Configuration

Pin No.	Function
1	Primary Dot
3	Primary
4	Secondary
5	Secondary Centre Tap
6	Secondary Dot

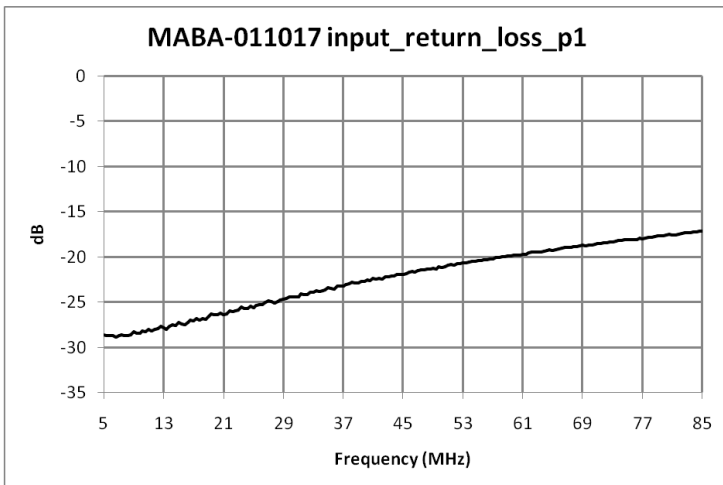
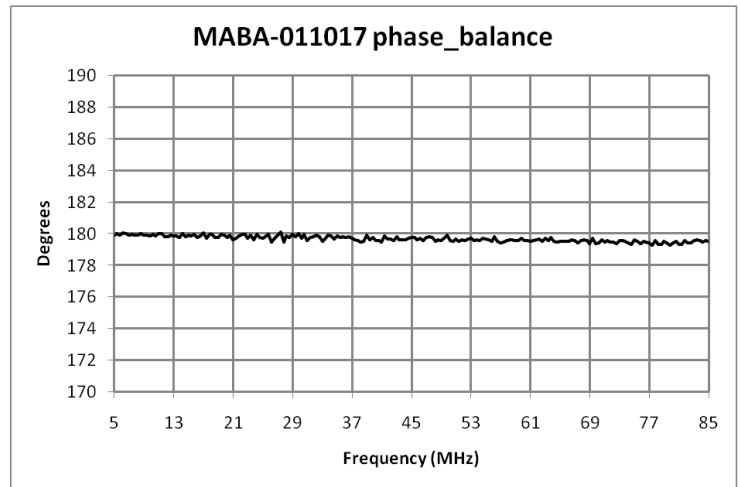
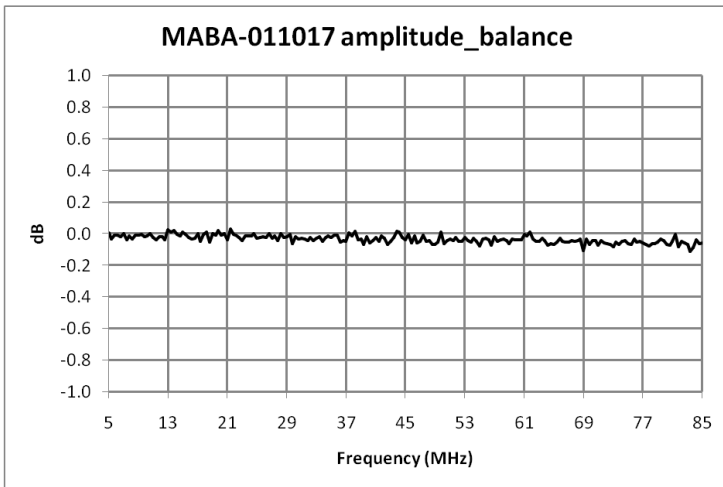
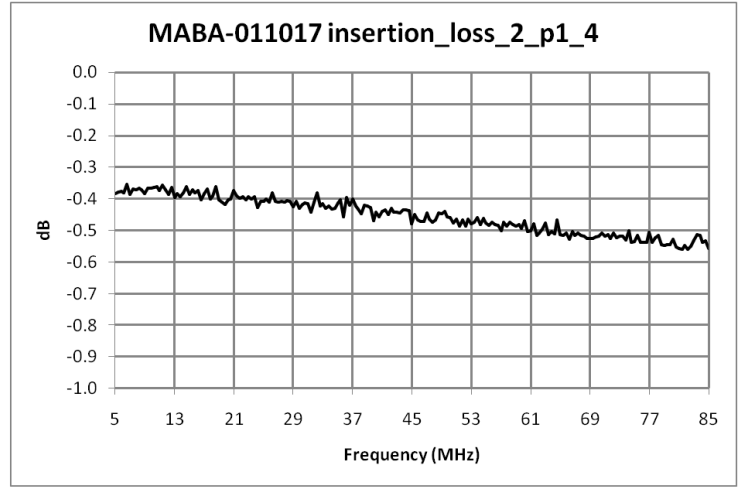
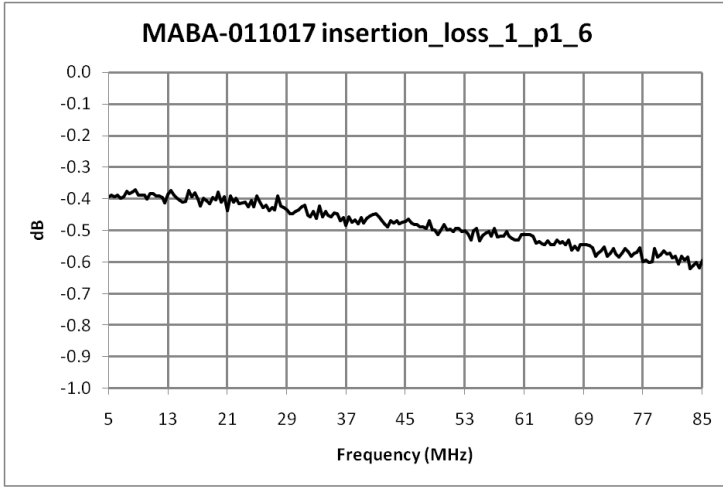
MABA-011017



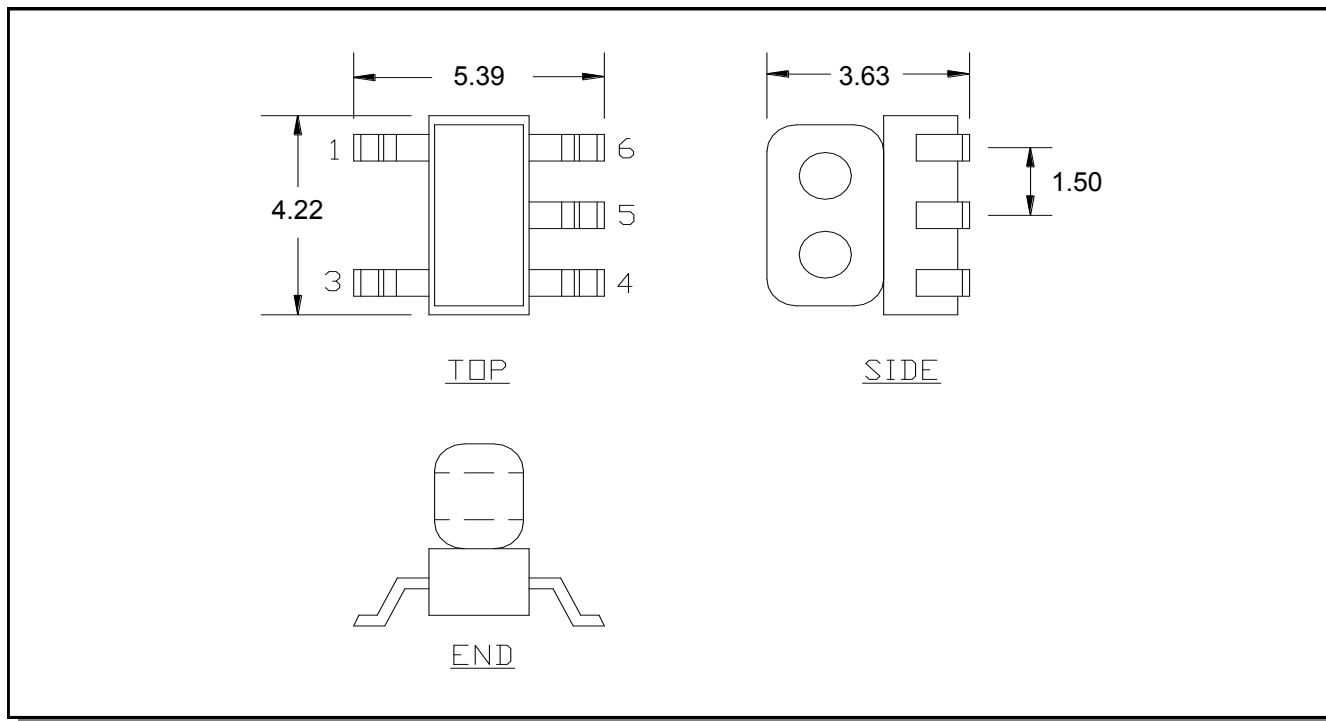
Transformer, 2:1 Flux Coupled Transformer
5MHz - 85 MHz

Rev. V3

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

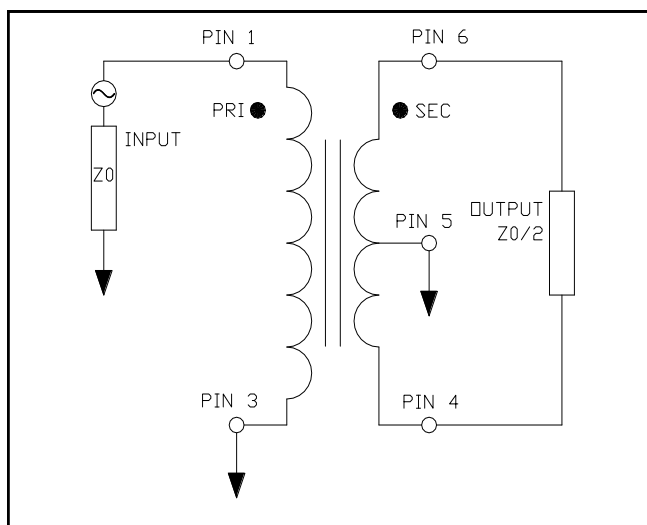


Outline Drawing

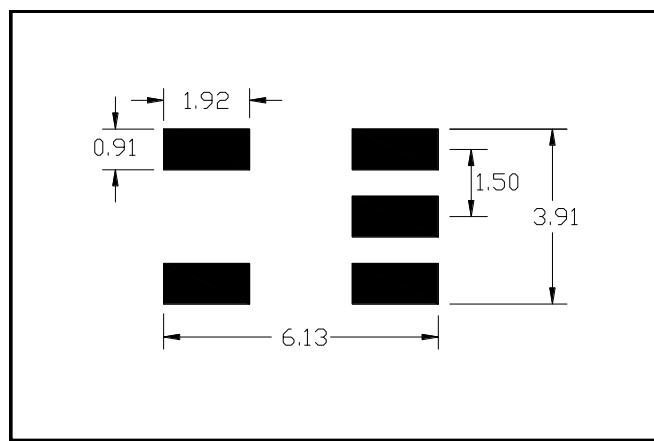


1. Dimensions in mm.
2. Tolerance: $\pm 0.2\text{mm}$ unless otherwise noted.
3. Model number and lot code printed on reel.
4. Lead plating (CuSn6) Lead finish SAC-305.

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 ₁)	mm	8.00
A ₀	mm	5.6
B ₀	mm	4.5
K ₀	mm	4.0
Orientation	-	F26
Reference Application note ANI-019 for orientation		

Ordering Information

Part Number	Description
MABA-011017	Tape & Reel
MABA-011017-TB	Customer Evaluation Board

Recommended Maximum Ratings

Parameter	Value
Input Power	At least +28dBm (631mW)
DC Current (tested at 5V)	At least 600mA
Operating Temperature Range	-40°C to +85°C

Temperature data available on request