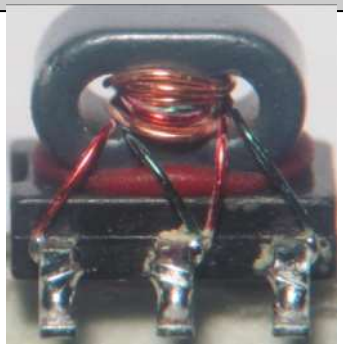
MABA-011017

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

Rev. V3

Features

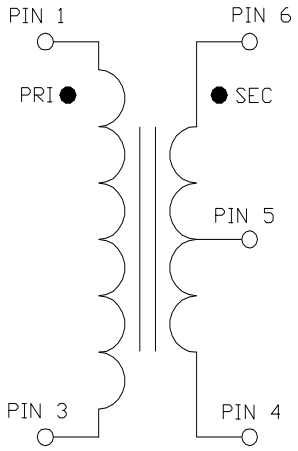
- Surface mount
- 2:1 Impedance ratio
- Centre tap on secondary
- Suitable for DOCSIS 3.0
- RoHS compliant
- Available on tape and reel



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

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 50 - 85 MHz	dB dB	- -	0.4 0.5	0.6 0.7
Insertion Loss (Pin1 - Pin4)	5 - 50 MHz 50 - 85 MHz	dB dB	- -	0.4 0.5	0.6 0.7
Amplitude Balance	5 - 50 MHz 50 - 85 MHz	dB dB	- -	0.02 0.04	±0.2 ±0.3
Phase Balance	5 - 50 MHz 50 - 85 MHz	° °	- -	0.1 0.3	±2.0 ±3.0
Input Return Loss (Pin1)	5 - 45 MHz 45 - 85 MHz	dB dB	20 15	25 19	- -

Schematic



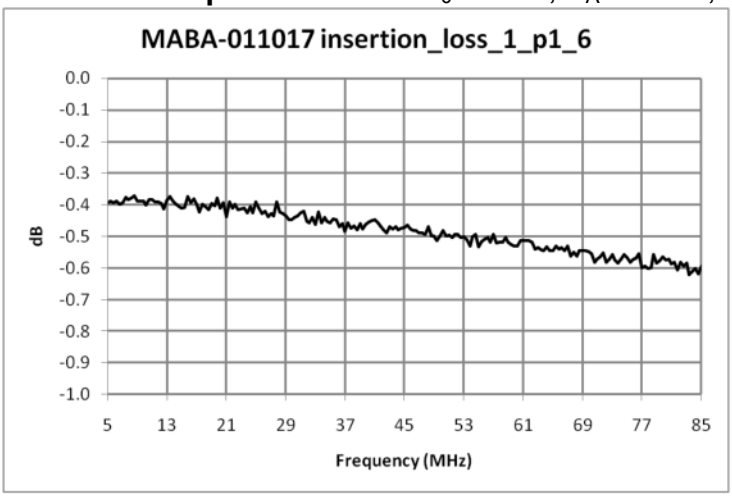
Pin Configuration

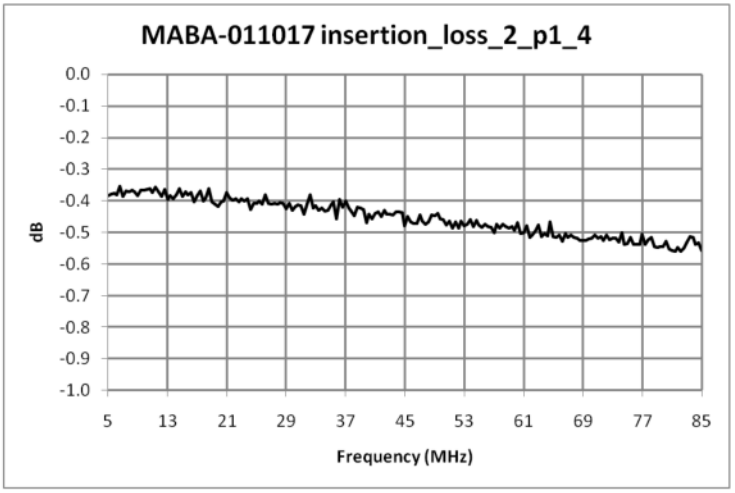
Pin No.	Function
1	Primary Dot
3	Primary
4	Secondary
5	Secondary Centre Tap
6	Secondary Dot

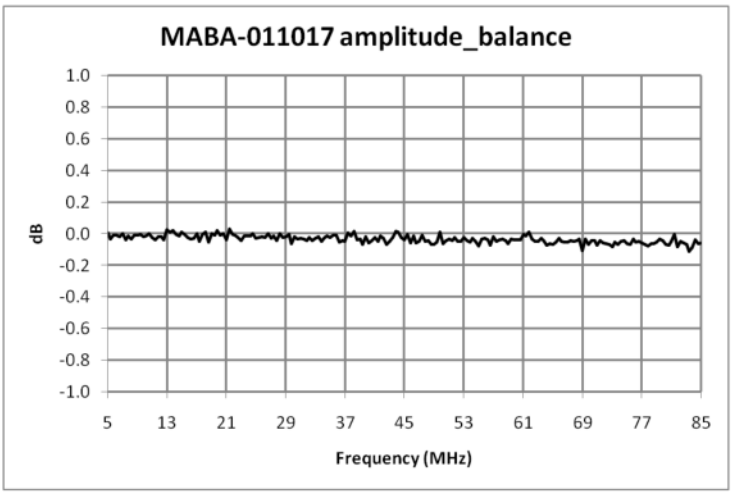
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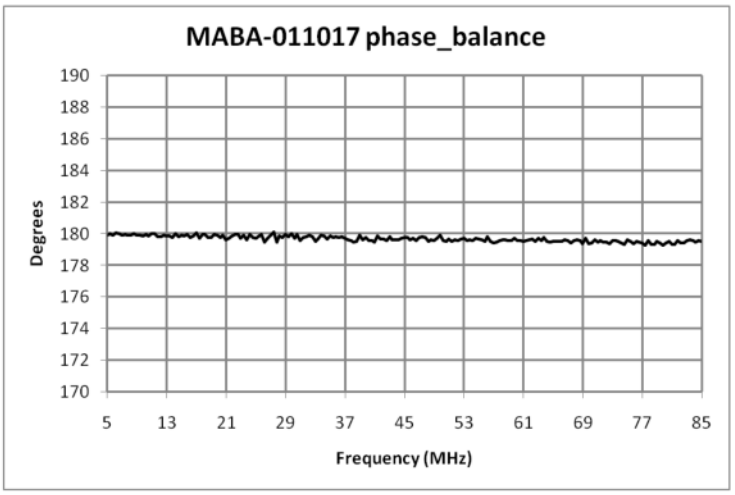
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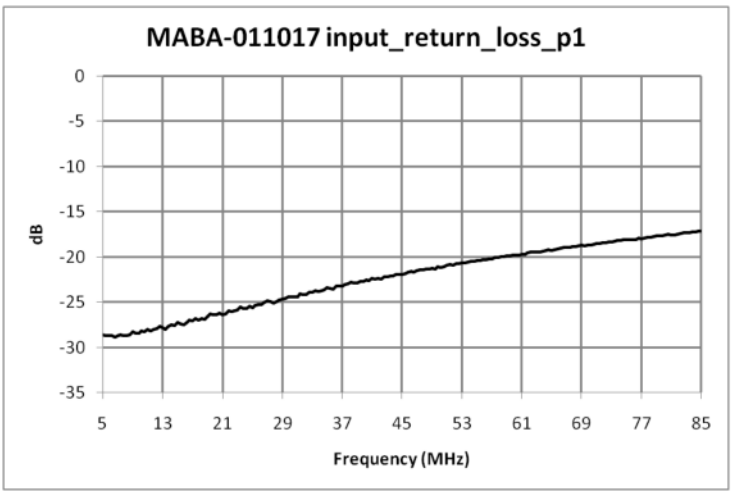
Electrical Specifications: Z_0 = 75Ω, T_A = 25°C, P_{in} = 0dBm











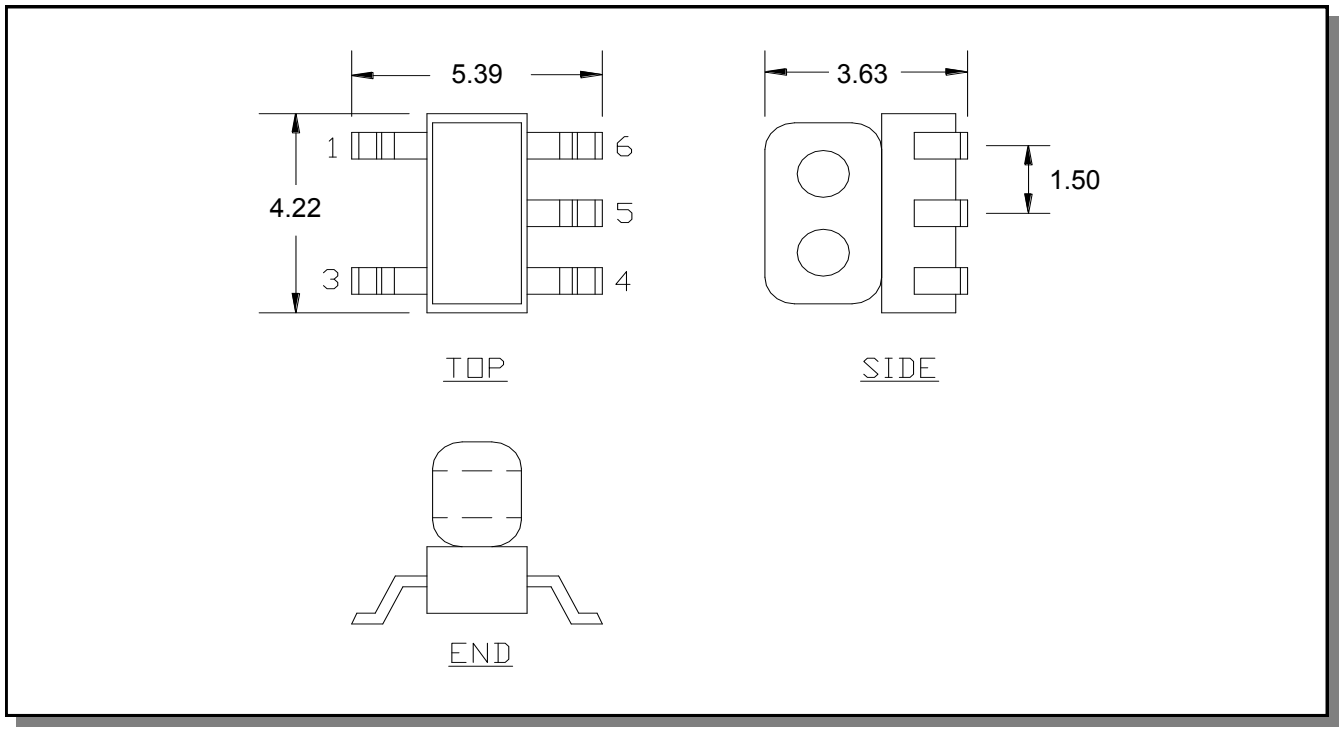
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Transformer, 2:1 Flux Coupled Transformer
5MHz - 85 MHz

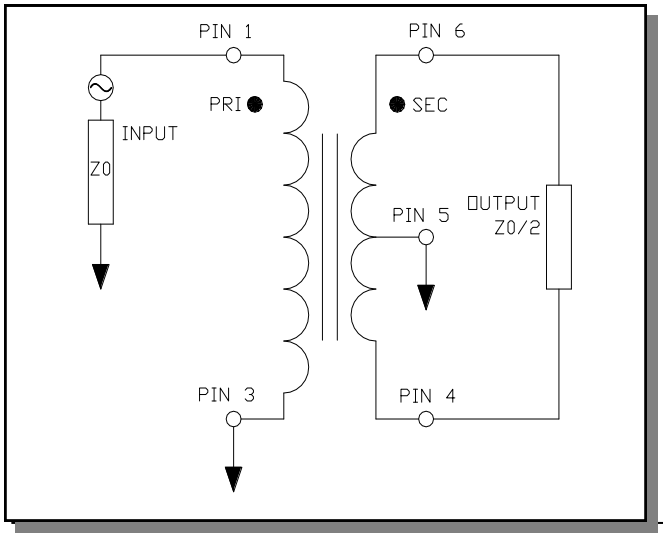
Rev. V3

Outline Drawing

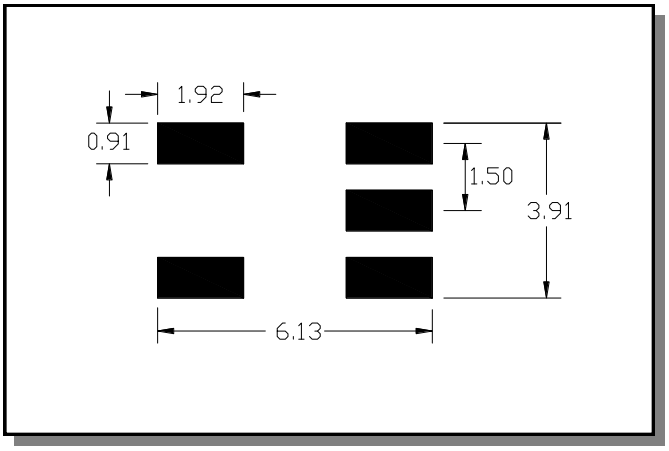


1. Dimensions in mm.
2. Tolerance: ±0.2mm unless otherwise noted.
3. Model number and lot code printed on reel.
4. Lead plating (CuSn6) Lead finish SAC-305.

Application Circuit



Recommended Footpprint



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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

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