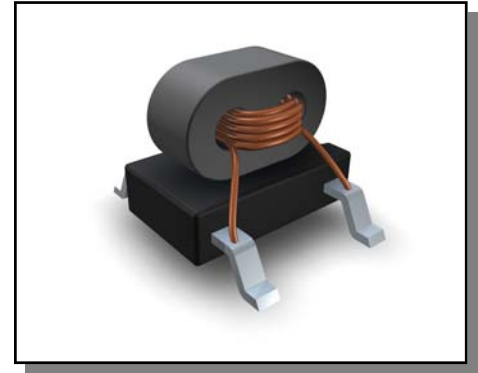


Transformer, 1:1 75Ω
30 MHz - 60 MHz

Rev. V1

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.



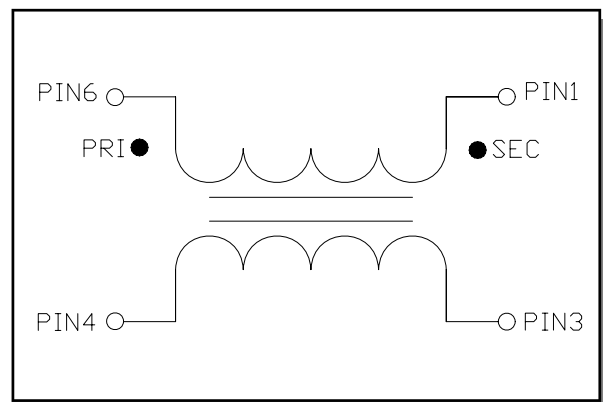
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	30		60
Impedance		Ω		75	
Impedance Ratio				1:1	
Insertion Loss 1 (Pin6 - 1)	30 - 60 MHz	dB	-	0.2	0.0
Insertion Loss 2 (Pin6 - 3)	30 - 60 MHz	dB	-	0.8	1.1
Amplitude Balance	30 - 60 MHz	dB	0.5	0.1	1.5
Phase Balance	30 - 60 MHz	Degree	-	0.2	± 2
Input Return Loss (Pin6)	30 - 60 MHz	dB	20	32	-

Pin Configuration

Pin No.	Function
1	Secondary Dot
2	Center Tap
3	Secondary
4	Primary
6	Primary Dot

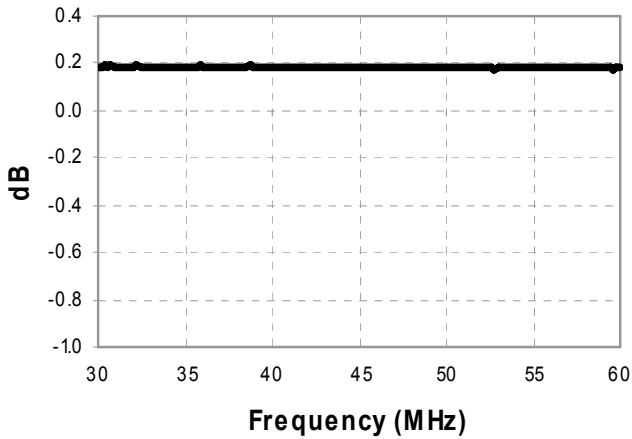
Schematic



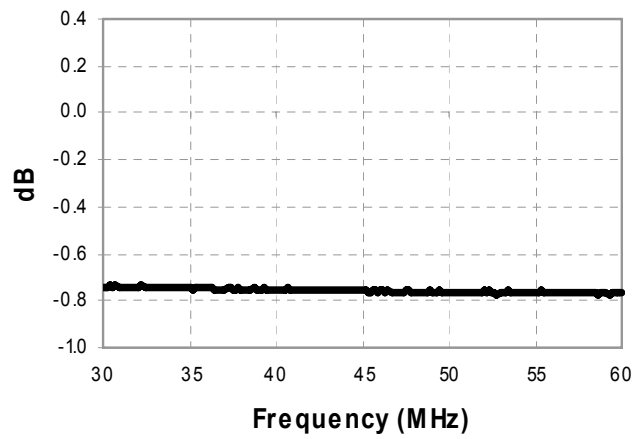
Transformer, 1:1 75Ω
30 MHz - 60 MHz

Rev. V1

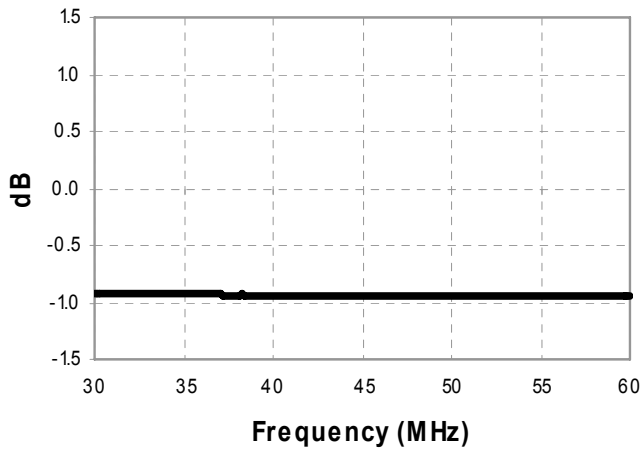
Insertion Loss 1: Pin6 - Pin1



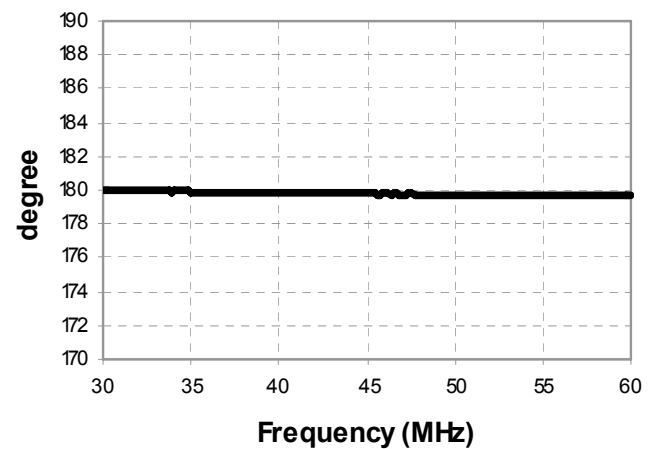
Insertion Loss 2: Pin6 - Pin3



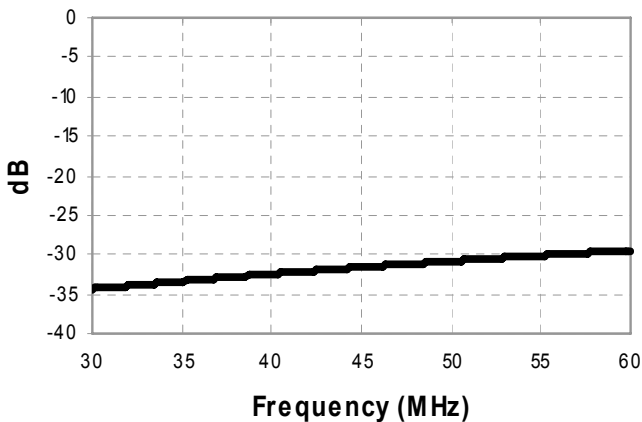
Amplitude Balance



Phase Balance

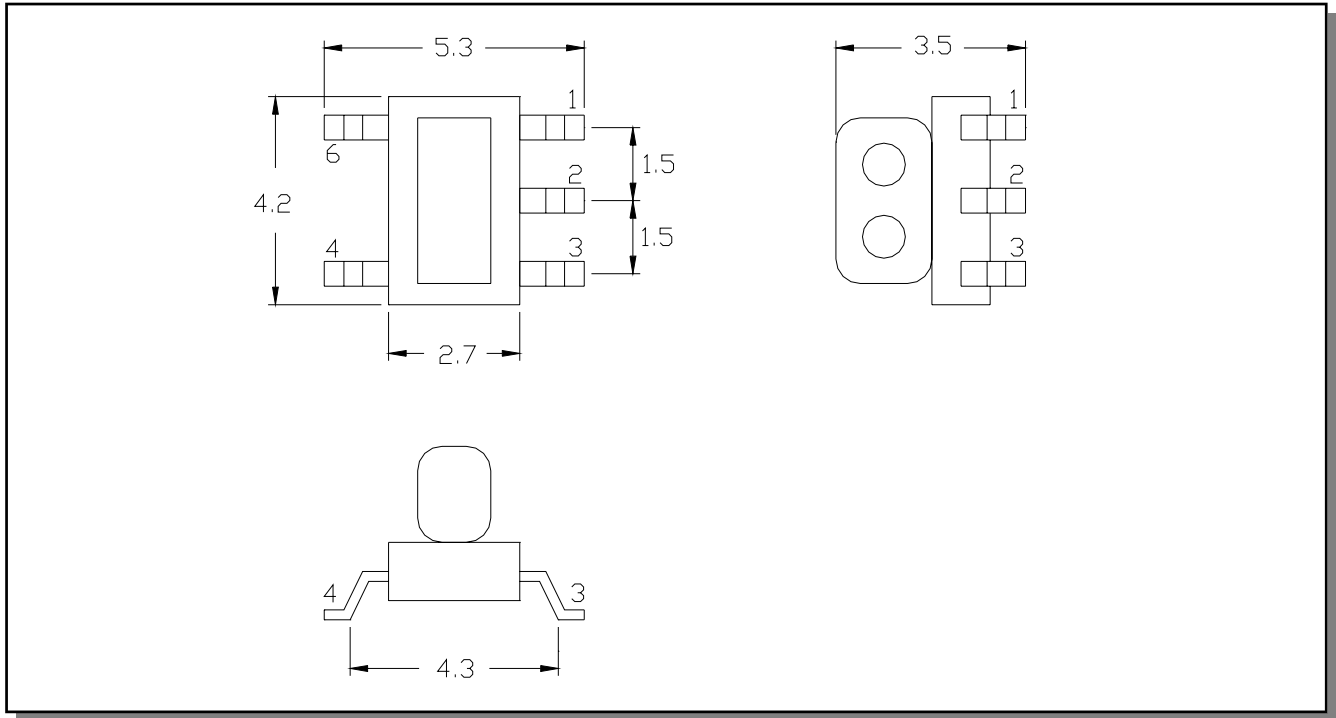


Input Return Loss: Pin6



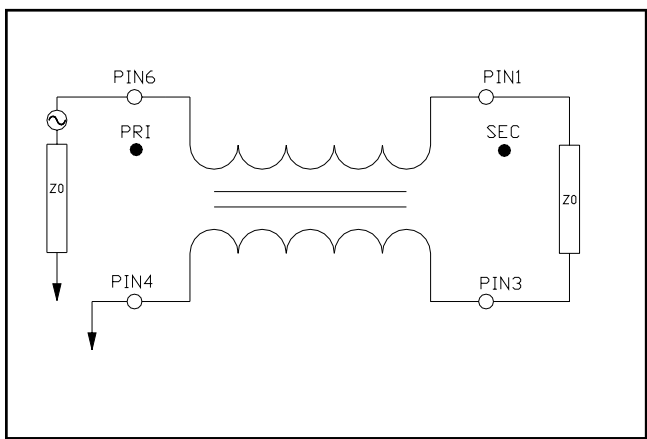
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

Outline Drawing

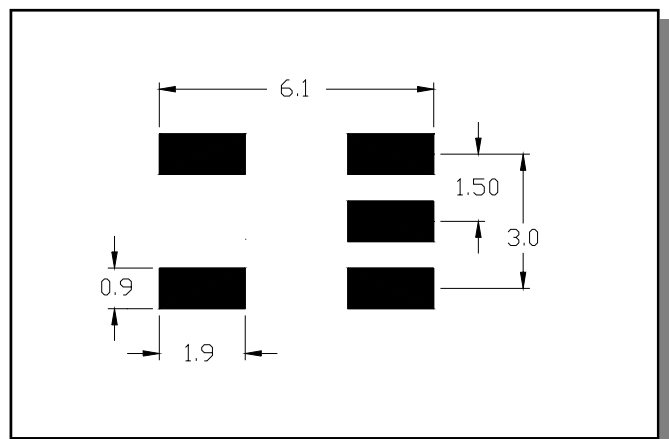


1. Dimensions in mm.
2. Tolerance: $\pm 0.2\text{mm}$ unless otherwise noted.
3. Model number and lot code printed on reel.
4. Pin material CuSn6

Application Circuit



Recommended Footprint



Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width (W)	mm	12.0
Pitch (P ₁)	mm	8.0
A ₀	mm	5.6
B ₀	mm	4.5
K ₀	mm	4.0
Orientation	-	F-26
Reference Application Note ANI-019 for orientation		

Ordering Information

Part Number	Description
MABA -010411-CT1160	Tape & Reel
MABA -010411-CT11TB	Customer Evaluation Board

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		200
Operating Temperature Range	°C	-40	+85
Storage Temperature Range	°C	-55	+125

Temperature data available on request

ECO History

Rev	Date	Description	ECO
V1	5 July 2010	Created datasheet	20100819