

E-Series RF 1:4 Transformer 3 - 800 MHz

Rev. V5

Features

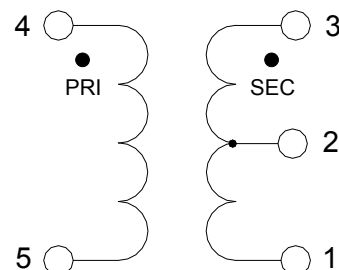
- 1:4 Impedance Ratio
- Surface Mount Package
- Tape and Reel Packaging Available
- RoHS* Compliant & 260°C Reflow Compatible

Description

The MABA-009488-61HWCA is a RoHS compliant 1:4 RF flux coupled transformer in a surface mount package.

Typical applications include single to balanced mode conversion.

Schematic



Pin Configuration

Pin #	Function	Pin #	Function
1	Secondary	4	Primary Dot
2	Secondary CT	5	Primary
3	Secondary Dot		

Electrical Specifications: Freq. = 3 - 800 MHz, $T_A = 25^\circ\text{C}$, $Z_0 = 50\ \Omega$, $P_{IN} = 0\ \text{dBm}$

Parameter	Freq. Test Conditions (MHz)	Units	Min.	Typ.	Max.
Insertion Loss	3 - 400 400 - 800	dB	—	0.6 1.5	1 3
Amplitude Balance	3 - 400 400 - 800	dB	—	0.1 0.7	0.5 1.5
Phase Balance	3 - 400 400 - 500	°	—	0.3 3.0	3 10
Input Return Loss	3 - 400 400 - 800	dB	13 10	22 11	30 13

Ordering Information

Parameter	Package
MABA-009488-61HWCA	2000 piece reel

Absolute Maximum Ratings

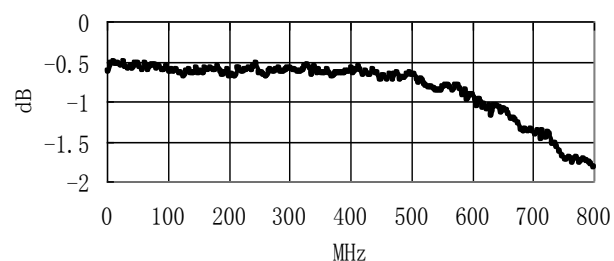
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	240 mA
Operating Temperature	-40°C to +85°C

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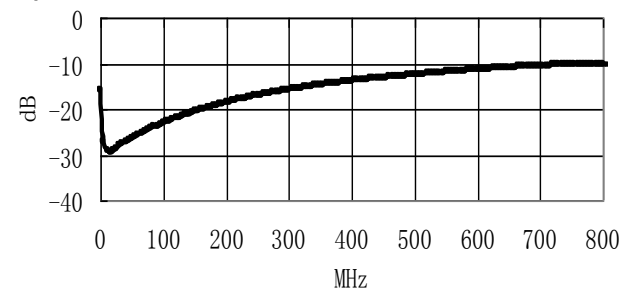
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Typical Performance Curves at +25°C

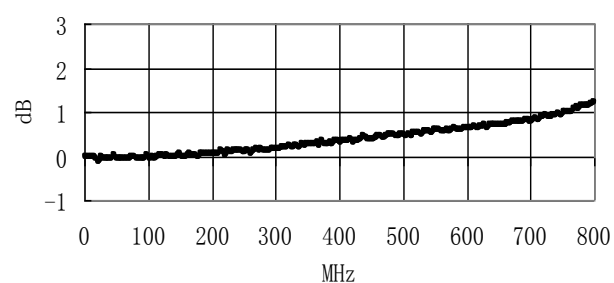
Insertion Loss



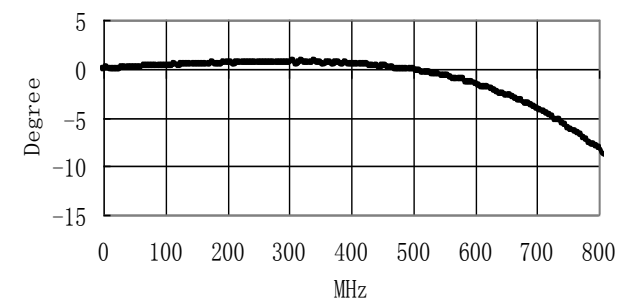
Input Return Loss



Amplitude Balance



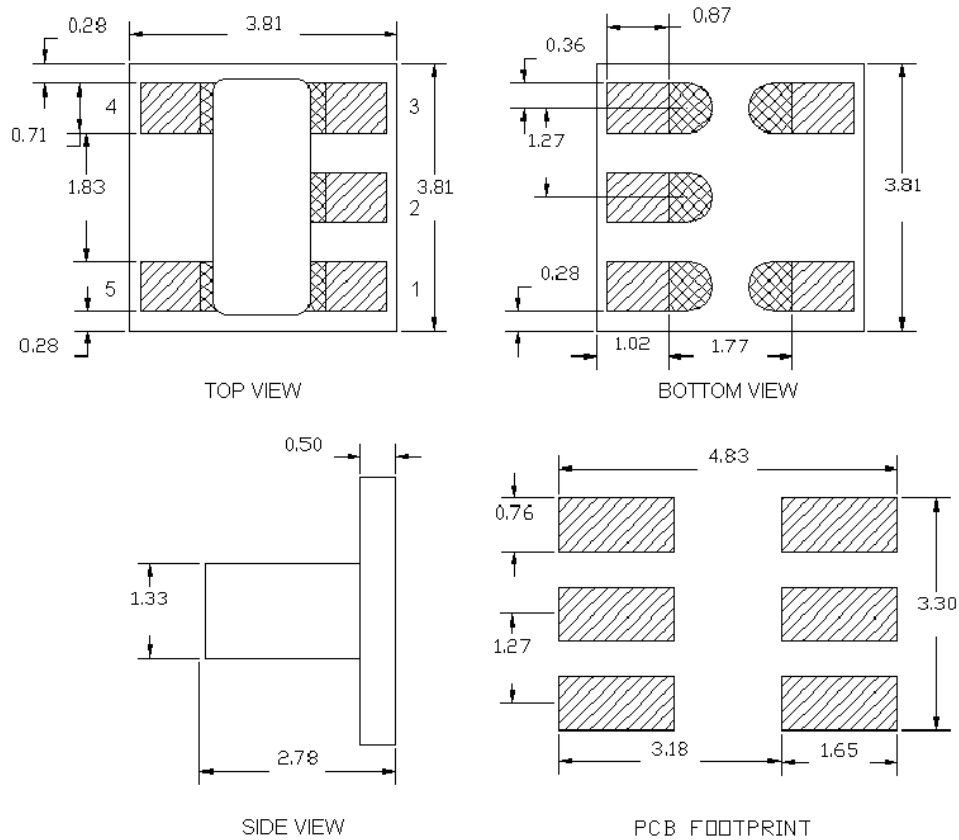
Phase Balance



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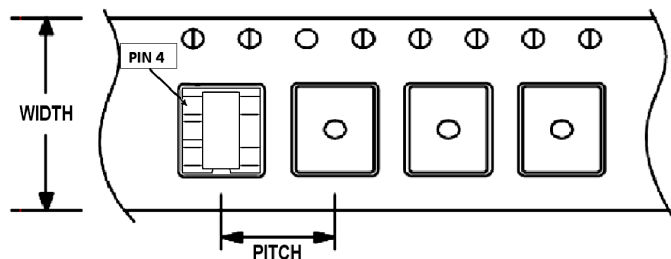
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Outline Drawing



* Dimensions are millimeters ± 0.38 unless otherwise specified.

Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	900
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Orientation	-	F31
Reference Application Note ANI-019 for orientation		

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