MABA-007159-000000



E-Series RF 1:1 Transmission Line Transformer 4.5 - 3000 MHz

Rev. V5

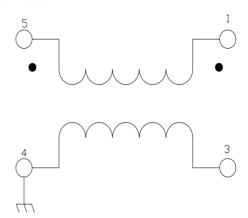
Features

- Surface mount
- Wide frequency range
- 1:1 impedance
- Lead Free
- RoHS* Compliant
- 260°C reflow compatible
- · Available on Tape and Reel

Description

The MABA-007159 is a RoHS compliant 1:1 RF transmission line transformer in a low cost, surface mount package. The windings of the MABA-007159 are welded to the package substrate for improved reliability and to eliminate lead content. Ideally suited for high volume cellular and wireless application. Parts are packaged in tape & reel.

Schematic



Pin Configuration

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

Electrical Specifications: RF Freq. = 4.5 - 3000 MHz, T_A = 25°C, Z_0 = 50 Ω

Parameter	Test Frequency	Units	Min.	Тур.	Max.
Insertion Loss	4.5 - 1000 1000 - 2000 2000 - 3000	dB	_	0.32 — —	1.0 2.0 3.5
Amplitude Unbalance	4.5 - 1000	dB	_	_	1.0
Phase Unbalance	4.5 - 1000	Degrees	_	_	20

Ordering Information

Part Number	Package
MABA-007159-000000	2000 piece reel

Recommended Maximum Ratings^{1,2}

Parameter	Absolute Maximum
DC Power	250 mW
DC Current	30 mA
Operating Temperature	-55°C to +85°C
Storage Temperature	-55°C to +125°C

- 1. Exceeding any one or combination of these limits may cause permanent damage to this device.
- MACOM does not recommend sustained operation near these survivability limits.

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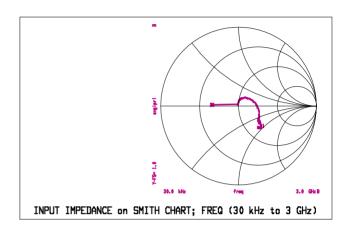
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Typical Performance Curves

Insertion Loss



Input Impedance



Phase Unbalance



Amplitude Unbalance

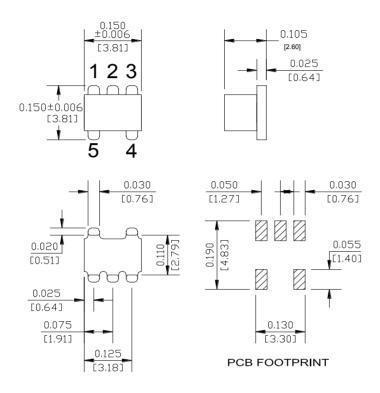




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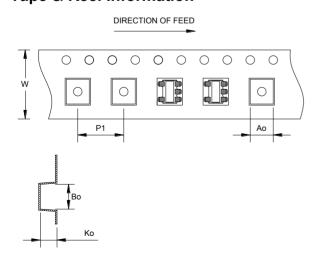
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Outline Drawing



^{*} Dimensions are inches (millimeters) ±0.015 (0.38) unless otherwise specified.

Tape & Reel Information



Tape & Reel Information

Item	Dimension (mm)
Ao	4.00 +/-0.1
Во	4.30 +/-0.1
Ko	2.90 +/-0.1
W	12.00 +/-0.3
P1	8.00 +/-0.1

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