

E-Series RF 1:1 Transformer with Tap 50-1200 MHz

Rev. V2

Features

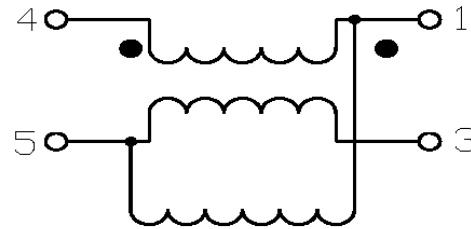
- 1:1 Impedance Ratio
- Surface Mount
- Tape and reel packaging available
- 260°C Reflow Compatible
- RoHS* compliant

Description

M/A-COM's MABA-009602-ES2922 is a RoHS Compliant 1:1 RF transmission line transformer in a low cost, surface mount package.

The MABA-009602-ES2922 is available in a SM-22 surface mount package and is designed to be utilized in both RoHS and standard reflow profiles. Parts are packaged in tape & reel.

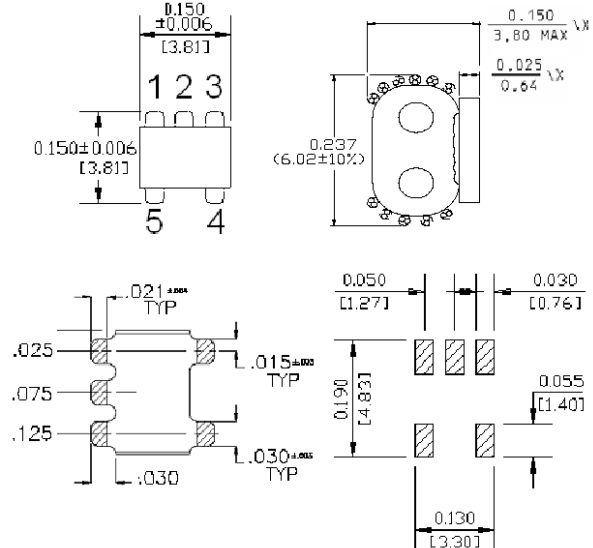
Schematic



Product Image



SM – 22 Package



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

Pin Configuration

Pin No.	Function
1	Output Thru
2	Not Connected
3	Output Coupled
4	Input
5	Ground

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Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	50 - 1200	MHz	—	—	—
Insertion Loss	—	50 - 600	dB	—	0.5	1.0
		600 - 1200	dB	—	1.0	2.0
Amplitude Imbalance	—	50 - 600	dB	—	0.1	0.3
		600 - 1200	dB	—	0.5	1.0
Phase Imbalance	—	50 - 600	Degrees	—	1.0	3.0
		600 - 1200	Degrees	—	4.0	13.0

Absolute Maximum Ratings^{1,2}

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	50 mA
Operating Temperature	-40°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.
2. M/A-COM does not recommend sustained operation near these survivability limits.

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

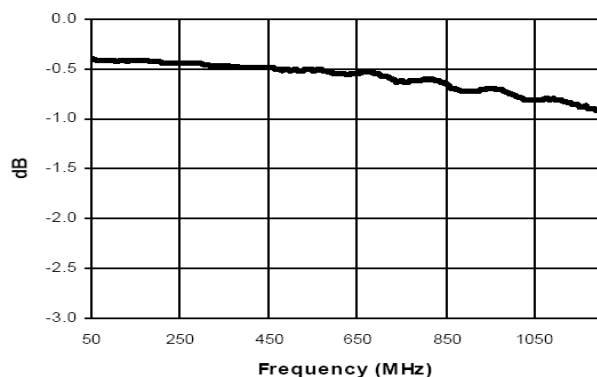
PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
 • **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.

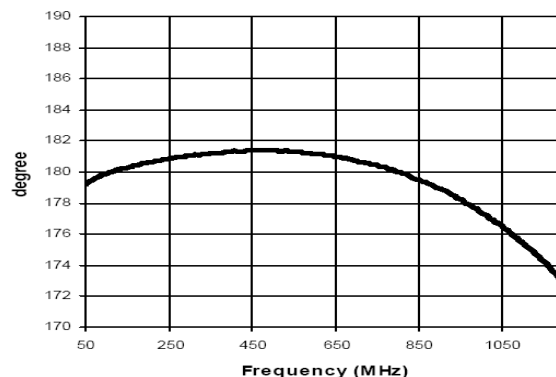
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Typical Performance Curves

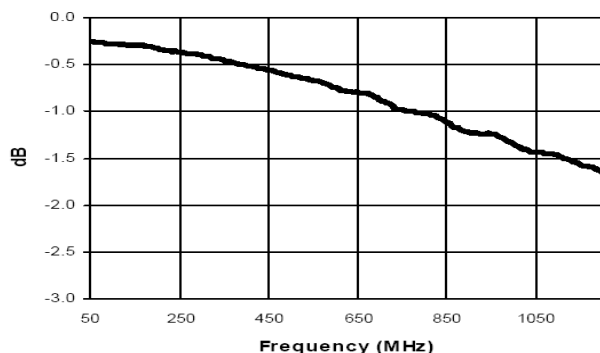
Insertion Loss Pin 4-1



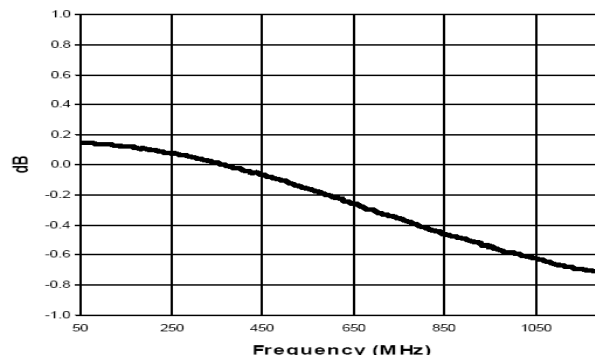
Phase Imbalance



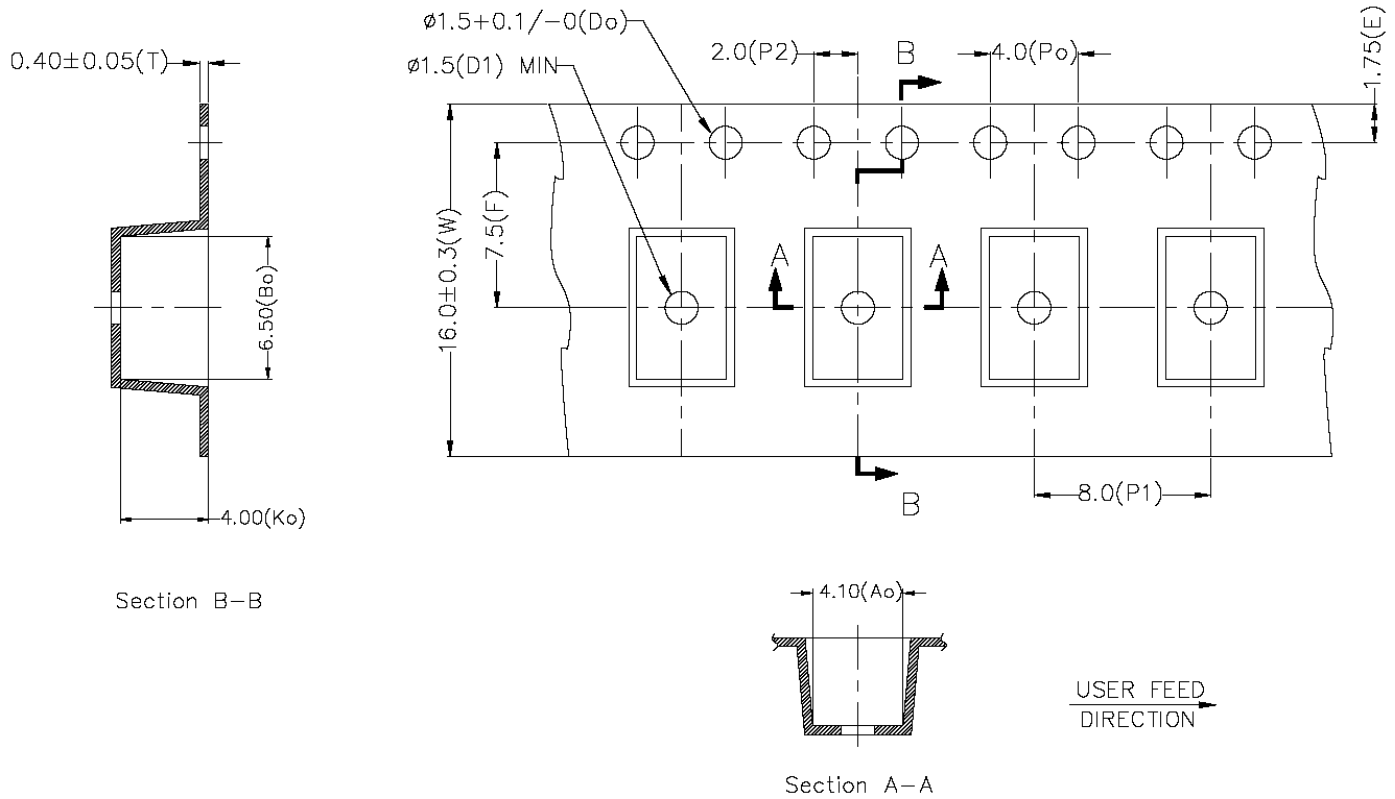
Insertion Loss Pin 4-3



Amplitude Imbalance



Tape & Reel Information



Item	Dimension
Ao	4.10mm +/-0.1mm
Bo	6.50mm +/-0.1mm
Ko	4.0mm +/-0.1mm
W	16.00mm +/-0.3mm
P1	8.00mm +/-0.1mm

Ordering Information

Part Number	Package
MABA-009602-ES2922	Tape and Reel (2000 piece Reel)