

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

Rev. V4

### Features

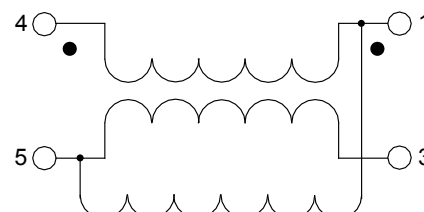
- 1:1 Impedance Ratio
- Surface Mount Package
- Tape and Reel Packaging Available
- RoHS\* Compliant & 260°C Reflow Compatible

### Description

The MABA-009602-ES2922 is a RoHS compliant 1:1 RF transmission line transformer in a surface mount package (SM-22).

Typical applications include single to balanced mode conversion.

### Schematic



### Pin Configuration

Pin #	Function	Pin #	Function
1	Output Thru	4	Input
2	No Connection	5	Ground
3	Output Coupled		

### Electrical Specifications: Freq. = 50 - 1200 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	50 - 600 600 - 1200	dB	—	0.5 1.0	1.0 2.0
Amplitude Balance	50 - 600 600 - 1200	dB	—	0.1 0.5	0.3 1.0
Phase Balance	50 - 600 600 - 1200	°	—	1.0 4.0	3.0 13.0

### Ordering Information

Parameter	Package
MABA-009602-ES2922	2000 piece reel

### Absolute Maximum Ratings

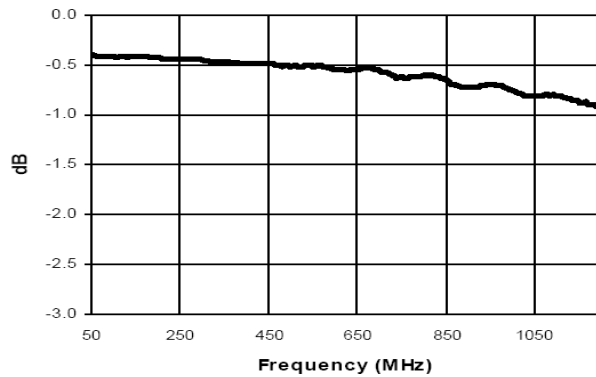
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	50 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

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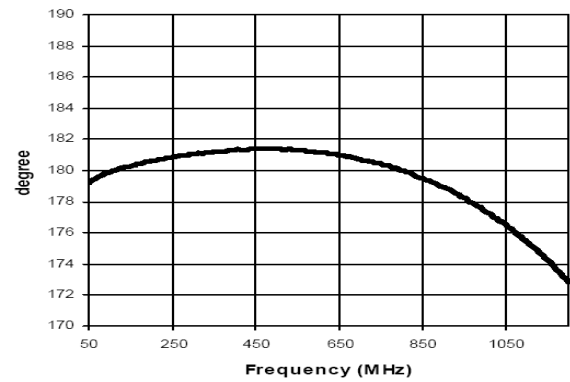
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### Typical Performance Curves

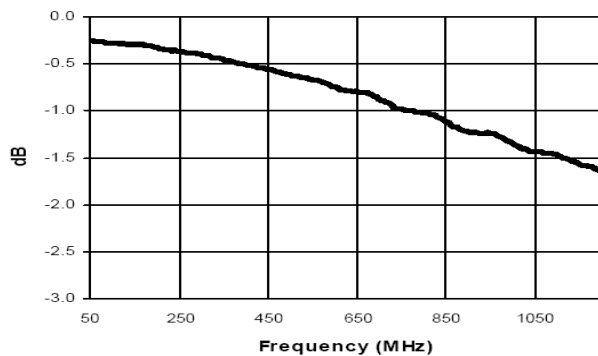
Insertion Loss Pin 4-1



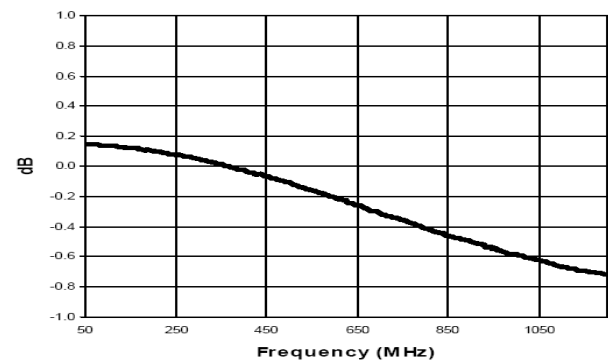
Phase Imbalance



Insertion Loss Pin 4-3



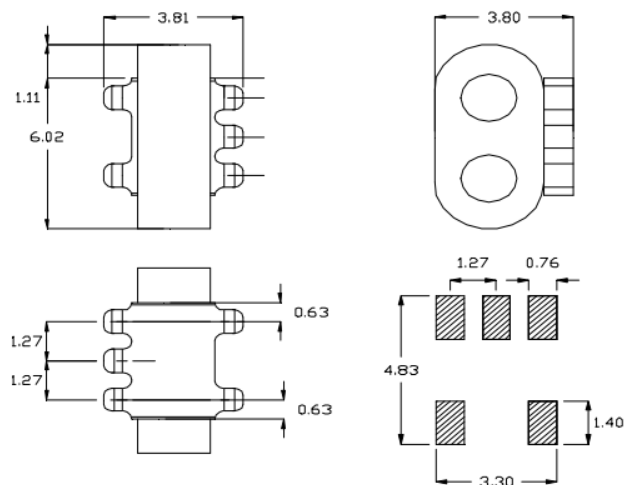
Amplitude Imbalance



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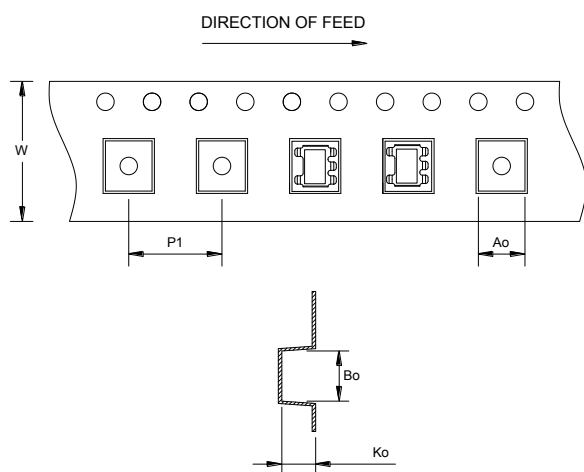
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### Case Style SM-22



Dimensions are inches (millimeters)  $\pm 0.015$  (0.38) unless otherwise specified.  
Drawing not to scale.

### Tape & Reel Information



### Dimensions

Item	Dimension (mm)
A <sub>0</sub>	4.10 $\pm 0.1$
B <sub>0</sub>	6.50 $\pm 0.1$
K <sub>0</sub>	4.00 $\pm 0.1$
W	16.00 $\pm 0.3$
P1	8.00 $\pm 0.1$

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