

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

Rev. V2

#### **Features**

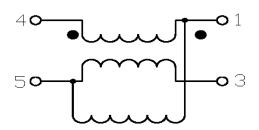
- 1:1 Impedance Ratio
- Surface Mount
- Tape and reel packaging available
- 260°C Reflow Compatible
- RoHS\* compliant

## **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.

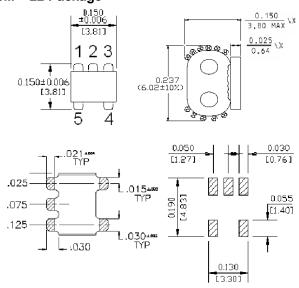
### **Schematic**



## **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	



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

Rev. V2

Electrical Specifications:  $T_A = 25$ °C,  $Z_0 = 50\Omega$ 

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

## **Absolute Maximum Ratings**<sup>1,2</sup>

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

<sup>1.</sup> Exceeding any one or combination of these limits may cause permanent damage to this device.

<sup>2.</sup> M/A-COM does not recommend sustained operation near these survivability limits.

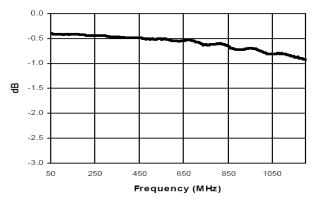


# E-Series RF 1:1 Transformer with Tap 50-1200 MHz

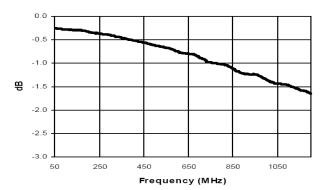
Rev. V2

## **Typical Performance Curves**

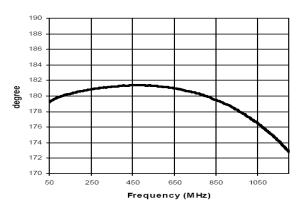
Insertion Loss Pin 4-1



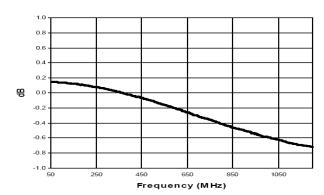
#### Insertion Loss Pin 4-3



#### Phase Imbalance



#### Amplitude Imbalance

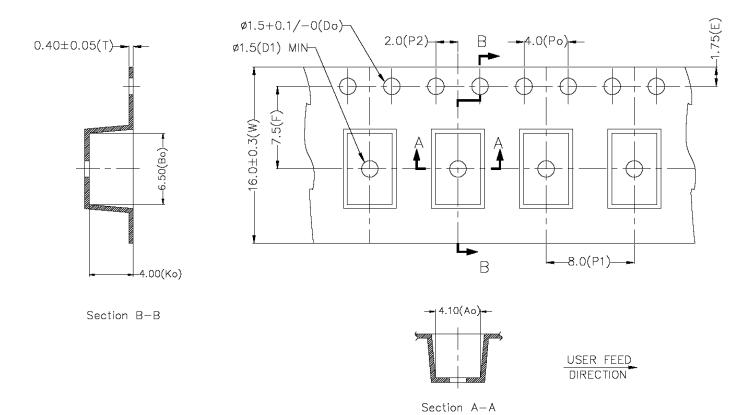




# E-Series RF 1:1 Transformer with Tap 50-1200 MHz

Rev. V2

### **Tape & Reel Information**



Item	Dimension
Ao	4.10mm +/-0.1mm
Во	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)

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.

• India Tel: +91.80.4155721

• China Tel: +86.21.2407.1588

Visit www.macomtech.com for additional data sheets and product information.