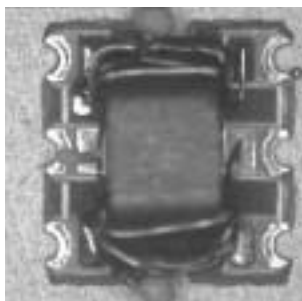




## E-Series RF 9:1 Transmission line Step-up Transformer 5 - 220 MHz

### Features

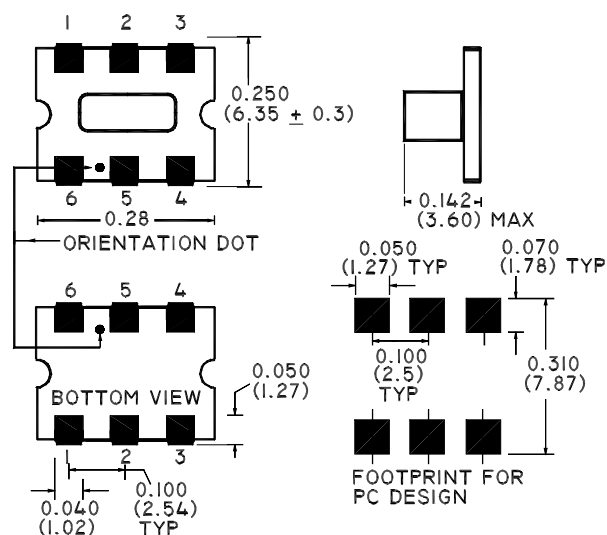
- Surface Mount
- 9:1 Impedance Ratio
- Available on Tape and Reel



### Description

M/A-COM's MABAES0022 is a 9:1 RF transmission line transformer in a low cost, surface mount package. Impedance 75 Ohms to 337 Ohms.

### SM-55 Package



### Electrical Specifications @25°C

Parameter	Units	Typical	Minimum	Maximum
Frequency Range 5-220	MHz	—	—	—
Insertion Loss 1 {From Pin 6 to 1 & From Pin 4 to 3} (Short Connections)	5 - 155 MHz	0.2	—	0.5
	155-220 MHz	0.8	—	1.0
Amplitude Imbalance 1	5 - 55 MHz	0.03	—	0.2
	55 - 155 MHz	0.04	—	0.3
	155 - 220 MHz	0.14	—	0.5
Phase Imbalance 1	5-55 MHz	0.5	—	1.0
	55 - 155 MHz	1.1	—	2.0
	155 - 220 MHz	1.5	—	2.5
Insertion Loss 2 {From Pin 6 to 3 & From Pin 4 to 1} (Cross connections)	5 - 55 MHz	0.8	—	1.0
	55-100 MHz	1.0	—	1.2
	100-220 MHz	1.4	—	1.8
Amplitude Imbalance 2	5 - 55 MHz	0.03	—	0.2
	55 - 155 MHz	0.04	—	0.3
	155 - 220 MHz	0.14	—	0.5
Phase Imbalance 2	5-55 MHz	1.0	—	2.0
	55 - 100 MHz	1.4	—	3.0
	100 - 220 MHz	2.5	—	4.0
Input Return Loss	5-220 MHz	10	8	—

Specifications subject to change without notice.

S 1617 G

V1.0

- North America: Tel. (800) 366-2266, Fax (800) 618-8883
- Asia/Pacific: Tel.+81-44-844-8296, Fax +81-44-844-8298
- Europe: Tel. +44 (1344) 869 595, Fax+44 (1344) 300 020

Visit [www.macom.com](http://www.macom.com) for additional data sheets and product information.

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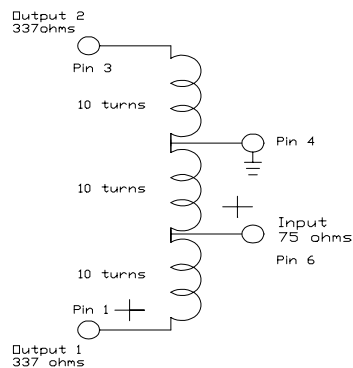
M/A-COM

### Functional Configuration

Function	Config 1 Pin No.	Config 2 Pin No.
Input	6	4
Output 1	1	3
Output 2	3	1
Ground	4	6
Not Connected	2,5	2,5

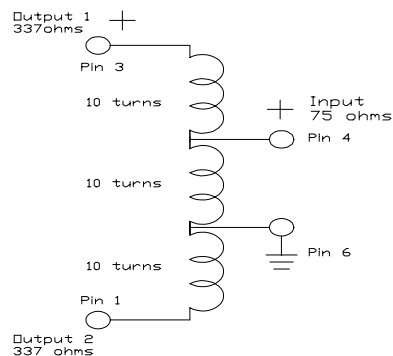
Note: Terminate unused output

#### Schematic For Config 1

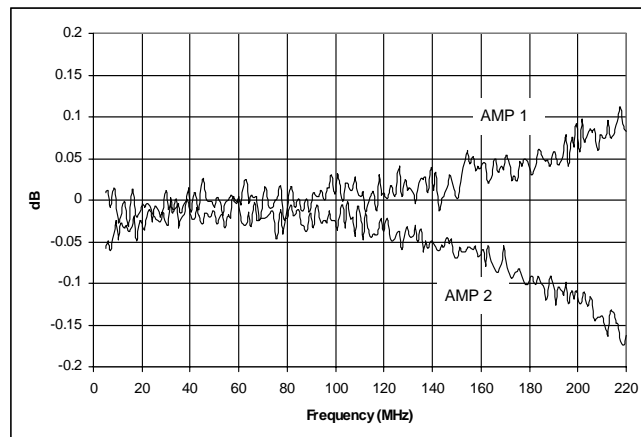


When Pin 4 is the I/P Pin 6 is ground  
And when Pin 6 is the I/P Pin 4 is ground.

#### Schematic For Config 2



#### Amplitude Imbalance

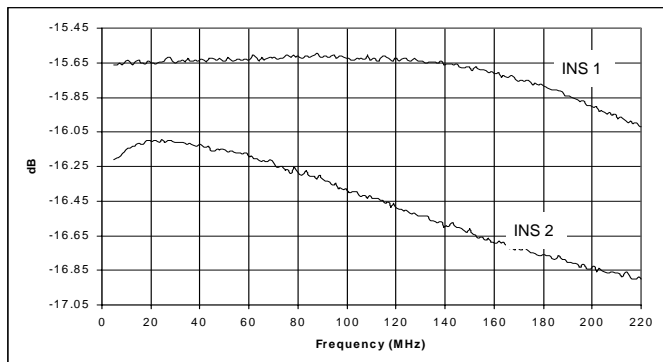


### Absolute Maximum Ratings

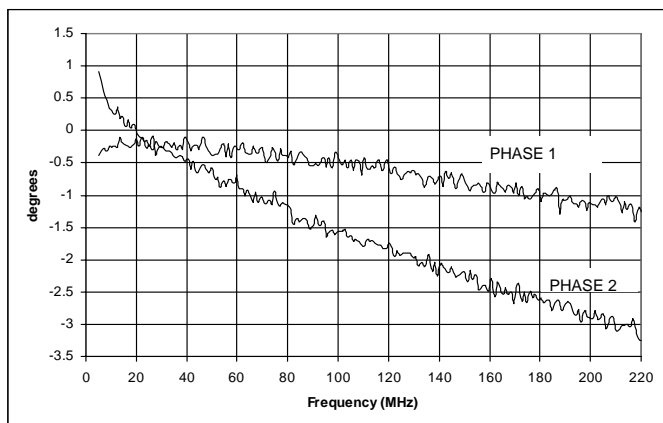
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-20°C to +85°C
Storage Temperature	-20°C to +85°C

### Typical Performance @ +25°C

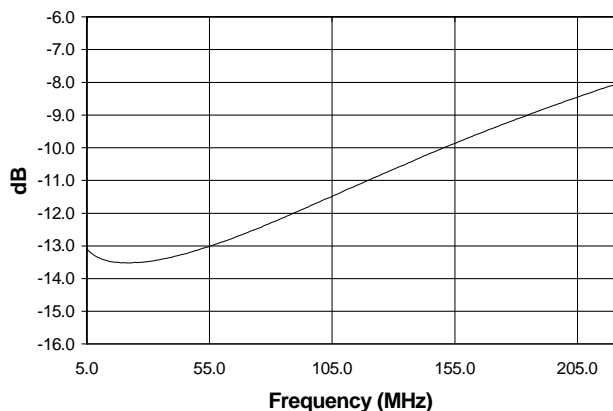
#### Insertion Loss 1 & 2 (Reference Level -15.45dB)



#### Phase Imbalance



#### Input Return Loss



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