

## 1:4 E-Series Transmission Line Step-up Transformer 2 - 1000 MHz

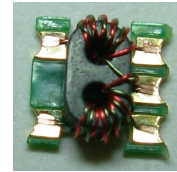
Rev. V2

### Features

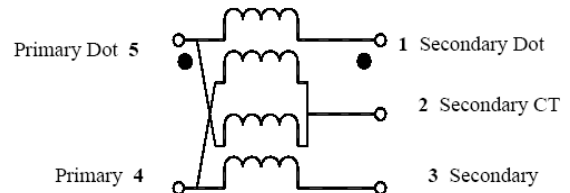
- Surface Mount Package
- 1:4 Impedance
- Wide Frequency Range
- RoHS Compliant, Lead Free
- Available on Tape and Reel

### Description

The MABA-009711-ETK2MM is a RoHS compliant 1:4 RF transmission line transformer in a surface mount package. The windings are welded to the package substrate for improved reliability and to eliminate lead content. Ideally suited for high volume cellular and wireless application.



### Schematic



### Pin Configuration

Pin No.	Function
1	Secondary Dot
2	Secondary CT
3	Secondary
4	Primary
5	Primary Dot

### Electrical Specifications: Freq. = 2 - 1000 MHz, $T_A = 25^\circ\text{C}$ , $Z_0 = 50 \Omega$ , $P_{IN} = 0 \text{ dBm}$

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Insertion Loss 1	3 - 500 MHz	dB	—	0.7	1.0
	2 - 700 MHz			—	2.0
	2 - 1000 MHz			—	3.0
Amplitude Unbalance	—	dB	—	—	0.3
Phase Unbalance	—	°	—	—	10
Input Return Loss	0.1 - 200 MHz	dB	28	15	8

### Ordering Information

Parameter	Package
MABA-009711-ETK2MM	2000 piece reel

### Absolute Maximum Ratings

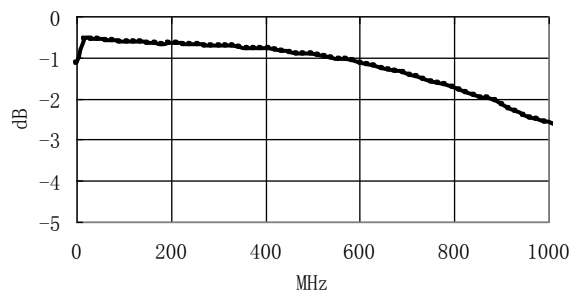
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	240 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

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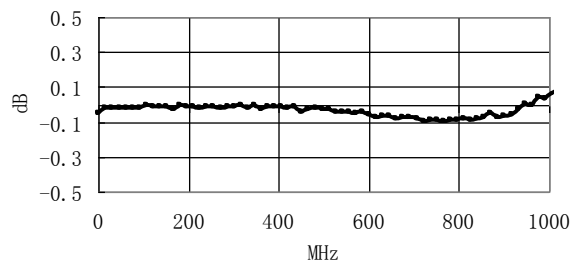
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Typical Performance:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50 \Omega$ ,  $P_{IN} = 0 \text{ dBm}$

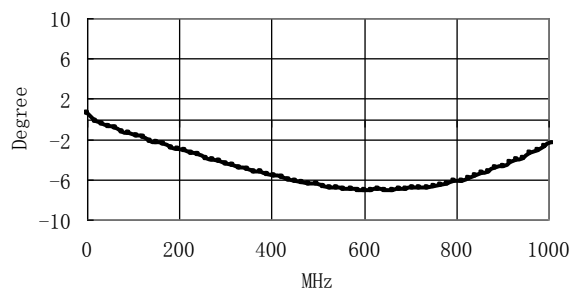
Insertion Loss



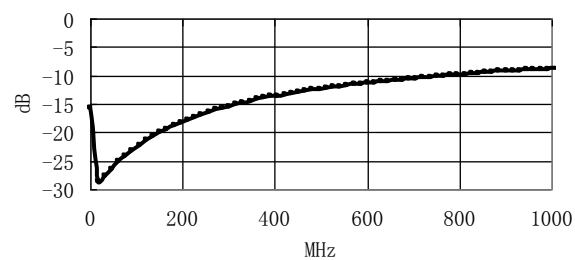
Amplitude Balance



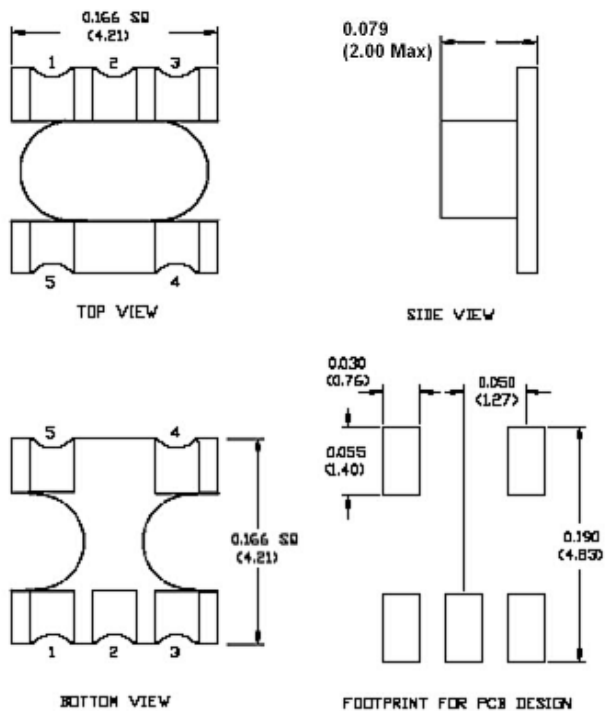
Phase Balance



Input Return Loss



## Case Style SM-164B



Dimensions are inches (millimetres) .xx ± 0.02, .xxx ± 0.010

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