

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

Rev. V2

Features

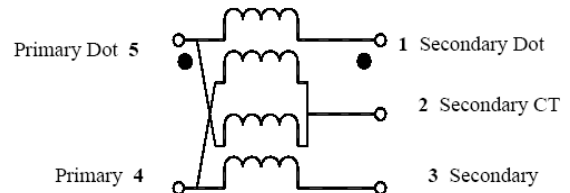
- Surface Mount Package
- 1:4 Impedance
- Wide Frequency Range
- RoHS Compliant, Lead Free
- Available on Tape and Reel

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

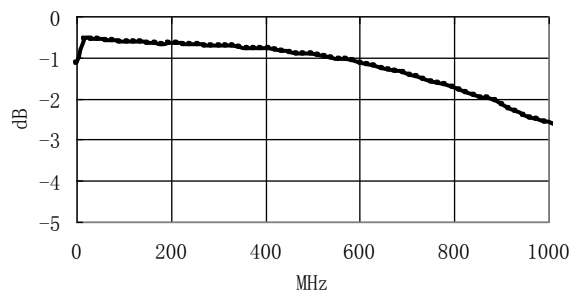
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	240 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

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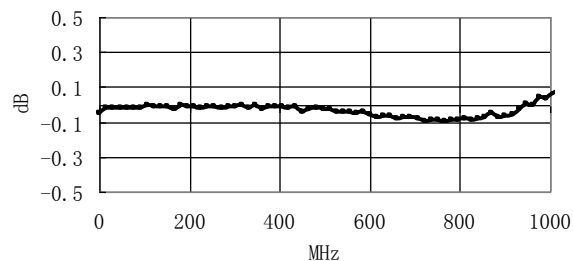
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Typical Performance: $T_A = 25^\circ\text{C}$, $Z_0 = 50 \Omega$, $P_{IN} = 0 \text{ dBm}$

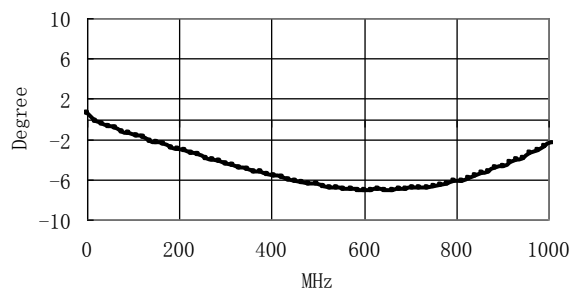
Insertion Loss



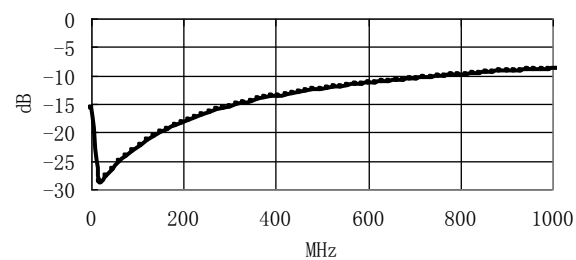
Amplitude Balance



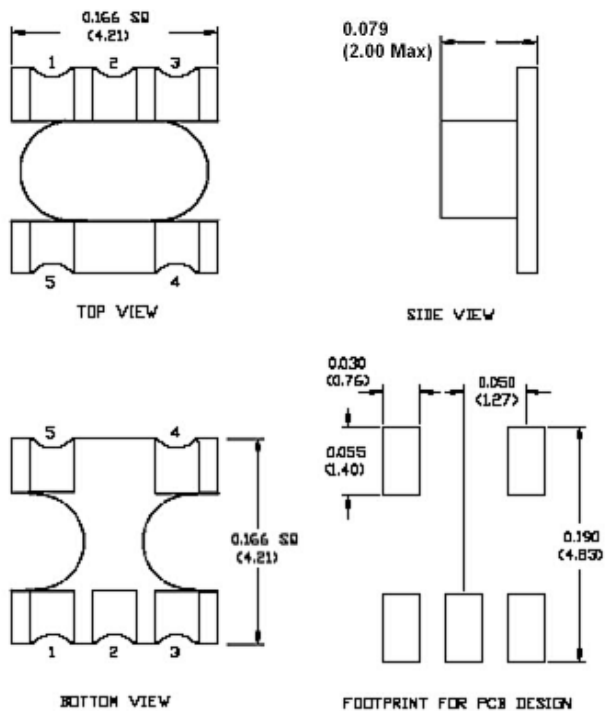
Phase Balance



Input Return Loss



Case Style SM-164B



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

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