

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

M/A-COM Products  
Advanced - Rev. V1

### Features

- 1:4 Impedance Ratio
- Surface Mount
- Wide frequency range
- Tape and reel packaging available
- 260°C Reflow Compatible
- RoHS\* compliant

### Description

M/A-COM's MABA-009711-ETK2MM is a RoHS compliant 1:4 RF transmission line transformer in a low cost, surface mount package. The windings of the MABA-009711-ETK2MM are welded to the package substrate for improved reliability and to eliminate lead content. Ideally suited for high volume cellular and wireless application. Parts are packaged in tape & reel.

### Product Image



### Ordering Information

Part Number	Package
MABA-009711-ETK2MM	Tape and Reel (2000 piece Reel)

### Electrical Specifications: $T_A = 25^\circ\text{C}$ , $Z_0 = 50\Omega$

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	-	2.0 - 1000	MHz	-	-	-
Insertion Loss	-	3.0 - 500	dB	-	0.7	1.0
		2.0 - 700	dB	-	-	2.0
		2.0 - 1000	dB	-	-	3.0
Amplitude Unbalance	-	2.0 - 1000	dB	-	-	0.3
Phase Unbalance	-	2.0 - 1000	Degrees	-	-	10
Input Return Loss	-	0.1 - 200	dB	28	15	8

### Pin Configuration

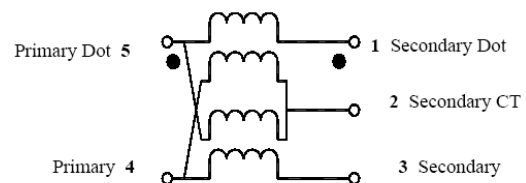
Pin No.	Function
1	Secondary Dot
2	Secondary CT
3	Secondary
4	Primary
5	Primary Dot

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

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	240 mA <sup>2</sup>
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

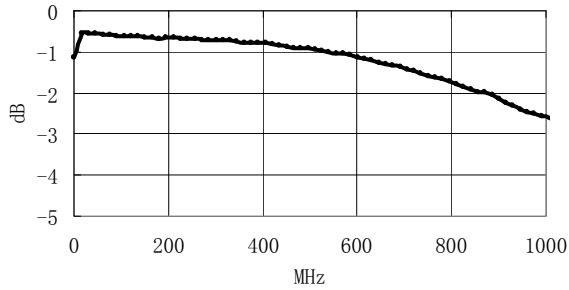
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

### Schematic

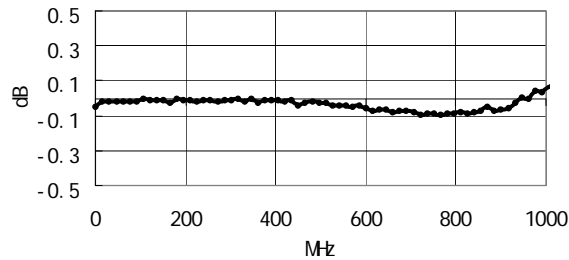


### Typical Performance Curves at +25°C

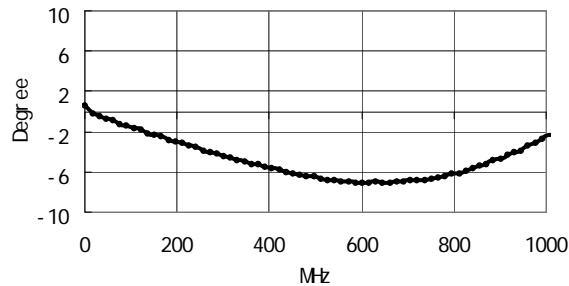
#### Insertion Loss



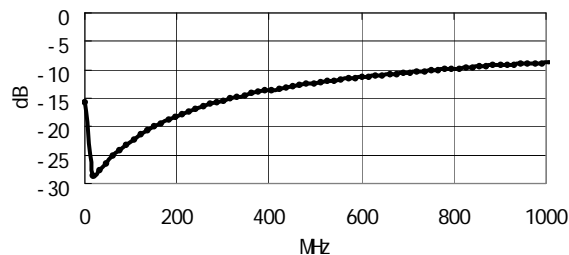
#### Amplitude Balance



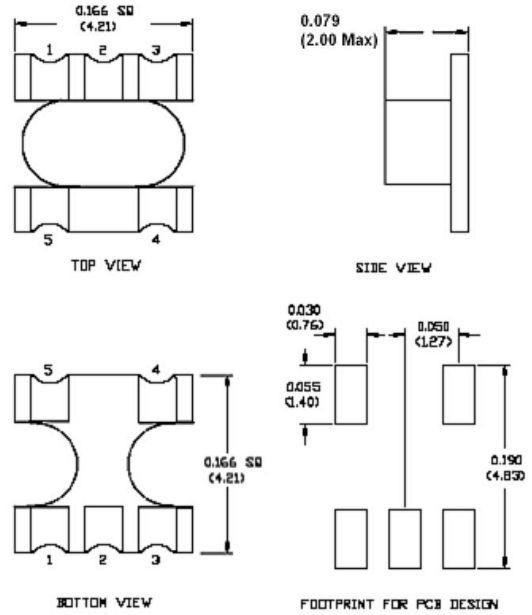
#### Phase Balance



#### Input Return Loss



### SM-164B Case Style



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010