# E-Series RF 1:1 Transformer 4.5 - 2000 MHz



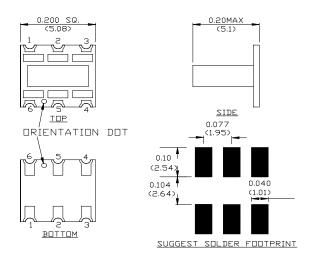
#### **Features**

- Surface Mount
- 1:1 Impedance Ratio
- Available on Tape & Reel

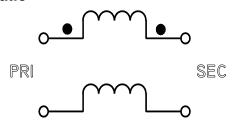
**Description** 

M/A-COM's ETN1-1-13 is a 1:1 RF transformer in a low cost, surface mount package. Ideally suited for high volume applications.

## SM-52 Package



### **Schematic**



# Electrical Specifications @25°C

Parameter	Units	Nominal	Maximum	Mean (x)	Sigma (σ)
Frequency Range 4.5 - 2000	MHz	_	_	_	_
Insertion Loss (f <sub>L</sub> - f <sub>U</sub> ) 4.5 - 1000 MHz 1000 - 2000 MHz	dB dB	_ _	1.0 2.0	0.32 —	0.036 —
Amplitude Unbalance 4.5 - 1000 MHz	dB	_	1.0	_	_
Phase Unbalance 4.5 - 1000 MHz	Degrees	_	20	_	_

Note: Mean and Sigma calculated from average loss at @  $(f_U-f_L)/2+f_L$ 

Please Note that the photograph above indicates typical package only, not actual unit.

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- ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.
- and/or prototype measurements. Commitment to develop is not guaranteed.

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  Commitment to produce in volume is not guaranteed.
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# **Absolute Maximum Ratings**

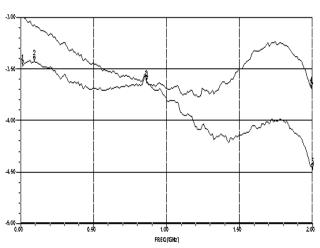
Parameter	Absolute Maximum		
RF Power	250 mW		
DC Current	30 mA		
Operating/Storage Temperature	-40°C to +85°C		

# **Functional Configuration**

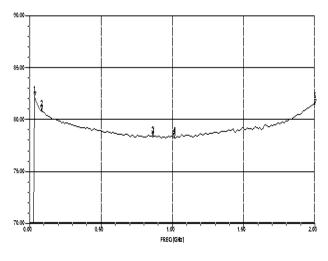
Function	Pin No.	
Secondary Dot	1	
Center Tap	-	
Secondary	3	
Primary	4	
Not Connected	2,5	
Primary Dot	6	

# Typical Performance @ +25°C

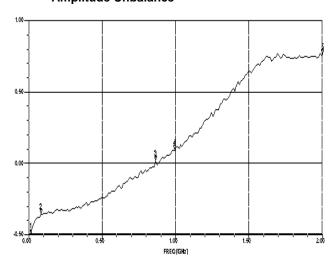
#### **Insertion Loss**



#### **Phase Unbalance**



### **Amplitude Unbalance**



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