

# E-Series RF 4:1 Transformer

## 1.0 - 350 MHz

**ETC4-1**

V3.00

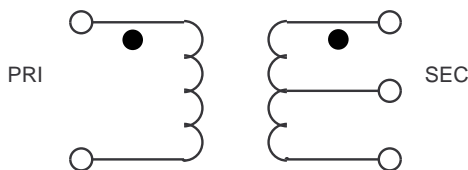
### Features

- Surface Mount
- 4:1 Impedance Ratio
- CT on Secondary

### Description

M/A-COM's ETC4-1 is a 4:1 RF transformer in a low-cost, surface mount package. Ideally suited for high volume cellular and wireless applications. Typical applications include single to balanced mode conversion and impedance matching.

### Schematic



### Specifications @ 25°C

Frequency Range: 1.0 - 350 MHz

Parameter	Maximum	Mean (x)	Sigma ( $\sigma$ )
Insertion Loss ( $f_L - f_U$ )	5.0 - 100 MHz	1.0 dB	0.67 dB
	2.0 - 300 MHz	2.0 dB	—
	1.0 - 350 MHz	3.0 dB	—
Amplitude Unbalance	1.0 - 350 MHz	0.5 dB	—
	5.0 - 100 MHz	0.1 dB	—
Phase Unbalance	5.0 - 100 MHz	1°	—
	1.0 - 350 MHz	5°	—

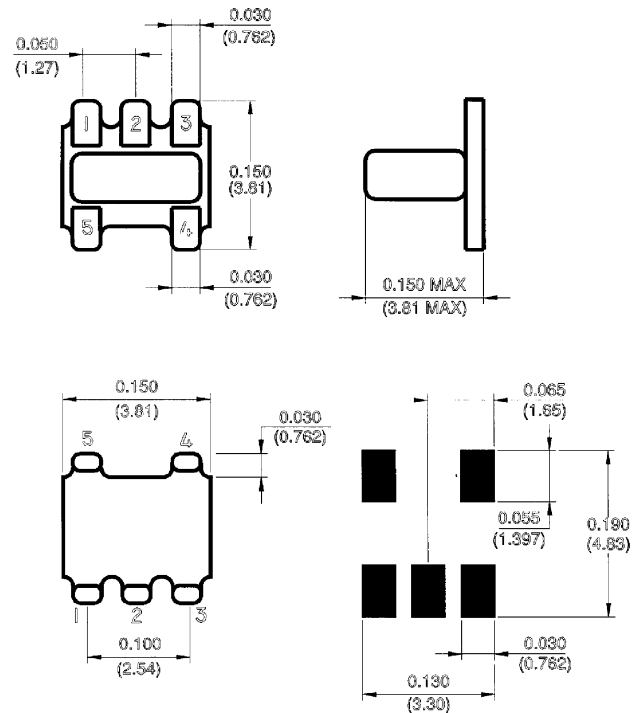
Note: Mean and sigma calculated from average loss at  $(f_U - f_L)/2 + f_L$ .

### Ordering Information

**Part No.**  
ETC4-1  
ETC4-1TR

**Packaging**  
Tubes  
Tape & Reel

### SM-22



Dimensions in ( ) are in mm.  
 Unless Otherwise Noted: .x =  $\pm 0.04$  (1.00)  
 .xx =  $\pm 0.02$  (0.50)  
 .xxx =  $\pm 0.010$  (0.250)

### Pin Configuration

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

S 0180 G

Specifications Subject to Change Without Notice.

**M/A-COM, Inc.**

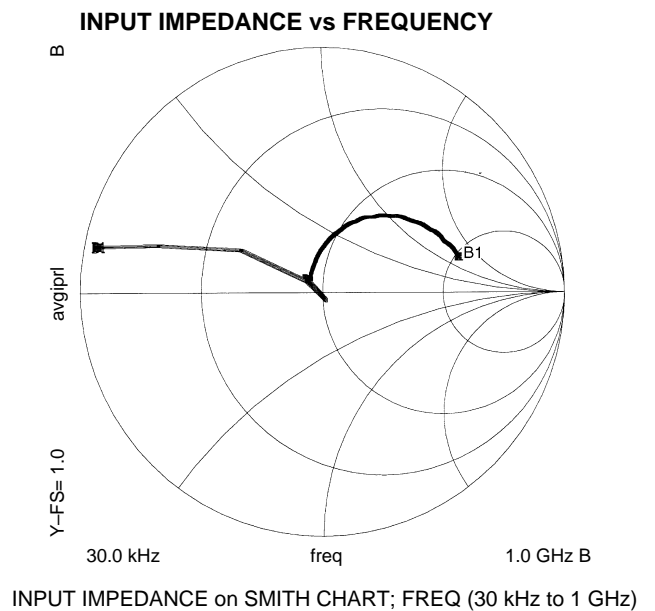
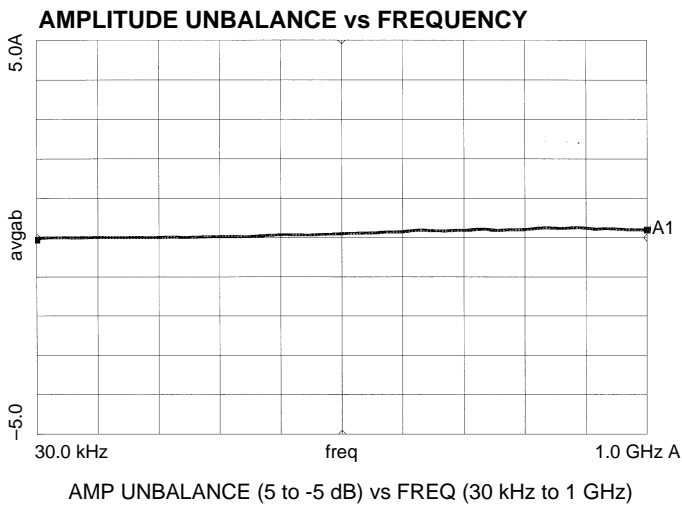
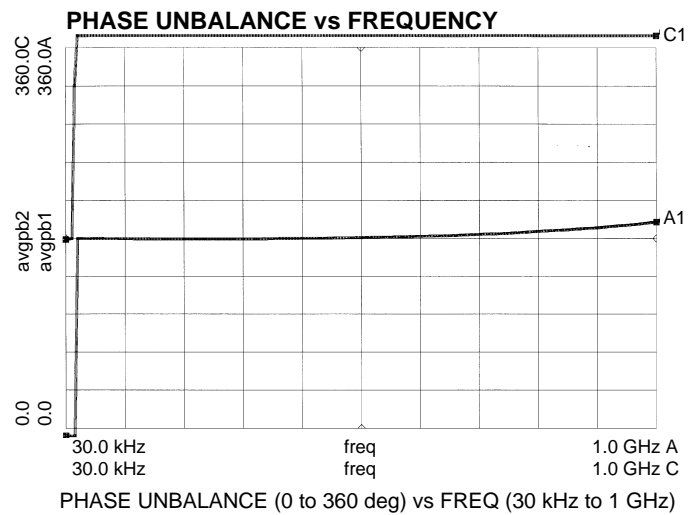
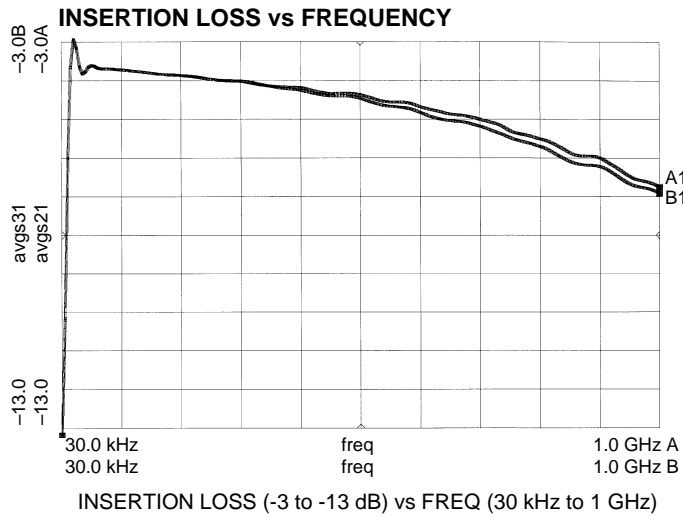
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### Absolute Maximum Ratings

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

### Typical Performance

Over Extended Bandwidth (30 kHz - 1.0 GHz)



Note: All measurements performed on Hewlett Packard HP8753D (201 sample points, linear scale) in a coplanar waveguide 50 ohm environment. Tables created using MDS software.

S-Parameter data available by E-Mail. Send your request to: eurotec@corp.macom.com.

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