

E-Series RF 4:1 Transformer

1.0 - 350 MHz

ETC4-1

V3.00

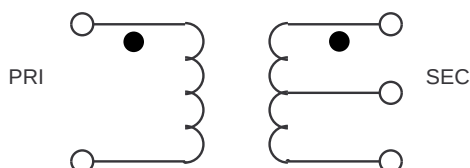
Features

- 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 (σ)
Insertion Loss ($f_L - f_U$)			
5.0 - 100 MHz	1.0 dB	0.67 dB	0.013
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°	—	—

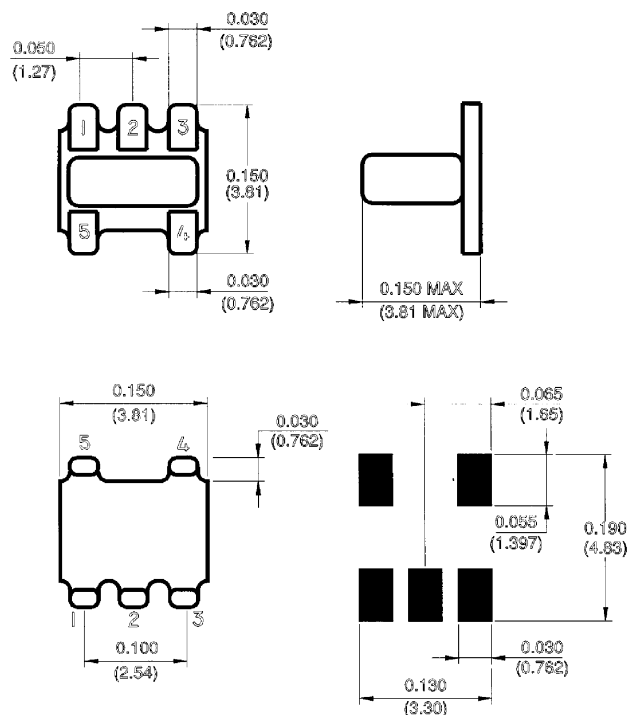
Note: Mean and sigma calculated from average loss at $(f_U - f_L)/2 + f_L$.

Ordering Information

Part No.
ETC4-1
ETC4-1TR

Packaging
Tubes
Tape & Reel

SM-22



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

Pin Configuration

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

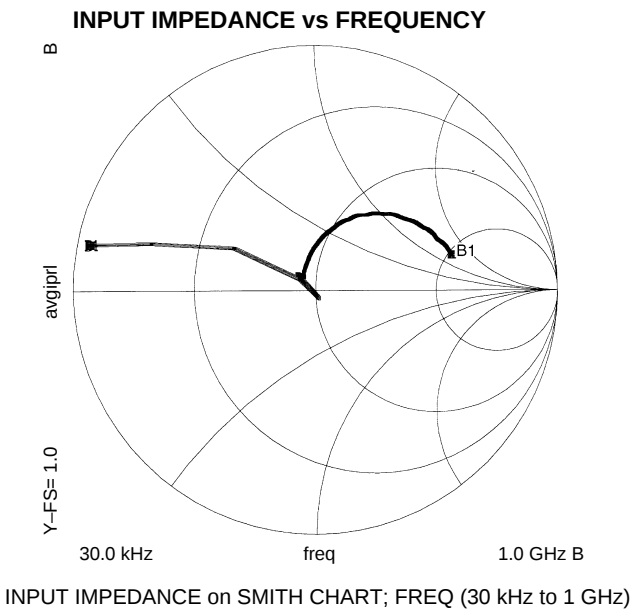
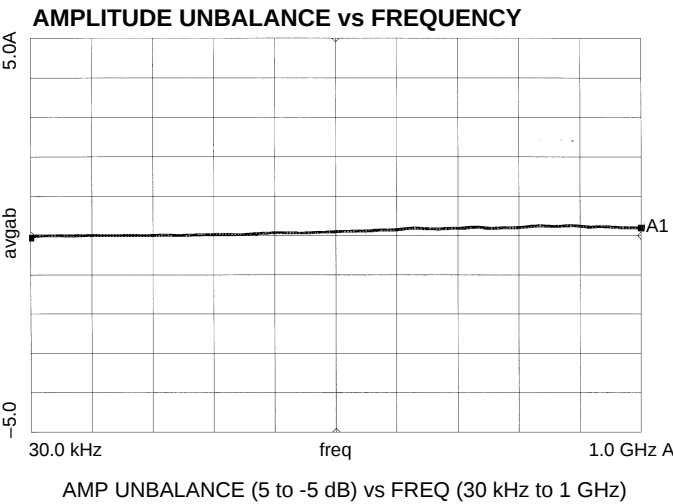
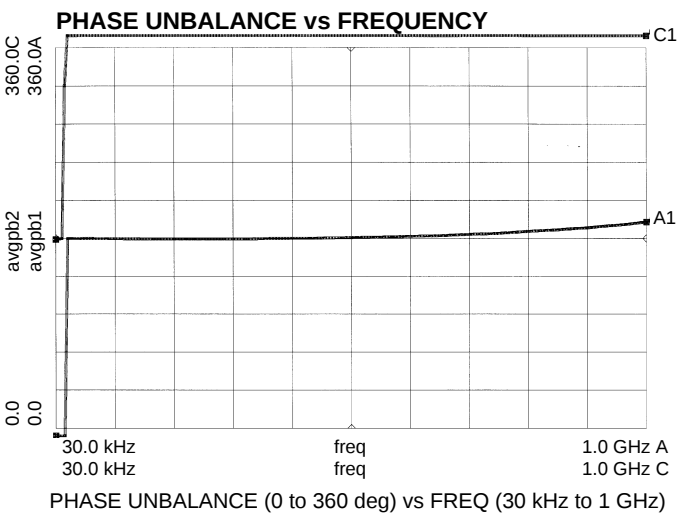
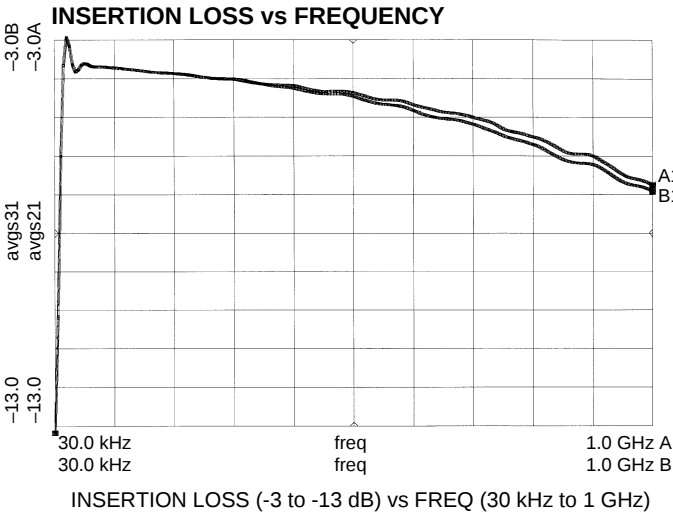
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Absolute Maximum Ratings

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.

Specifications Subject to Change Without Notice.