

E-Series RF 4:1 Transformer

890 - 960 MHz

ETC4-1T-11

V3.00

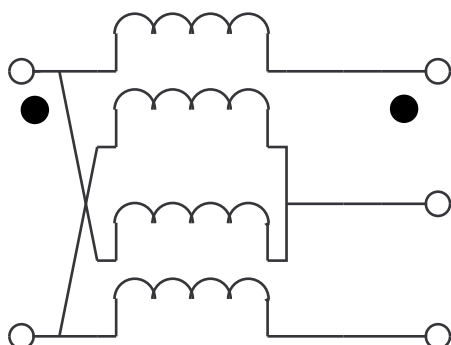
Features

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

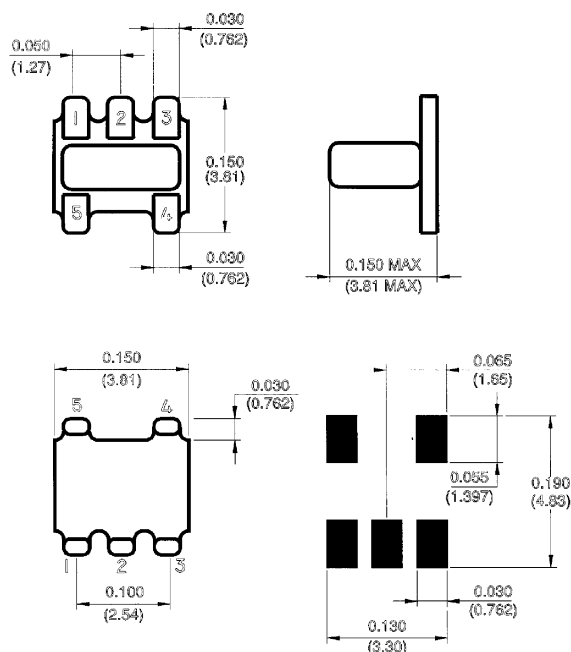
Description

M/A-COM's ETC4-1T-11 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



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)

Specifications @ 25°C

Frequency Range: 890 - 960 MHz

Parameter	Maximum	Mean (x)	Sigma (σ)
Insertion Loss ($f_L - f_U$)	1.75 dB	0.22 dB	0.094
Amplitude Unbalance	3.0 dB	—	—
Phase Unbalance	20°	—	—

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

Pin Configuration

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

Ordering Information

Part No.
ETC4-1T-11
ETC4-1T-11TR

Packaging
Tubes
Tape & Reel

S 0840 D

M/A-COM, Inc.

Specifications Subject to Change Without Notice.

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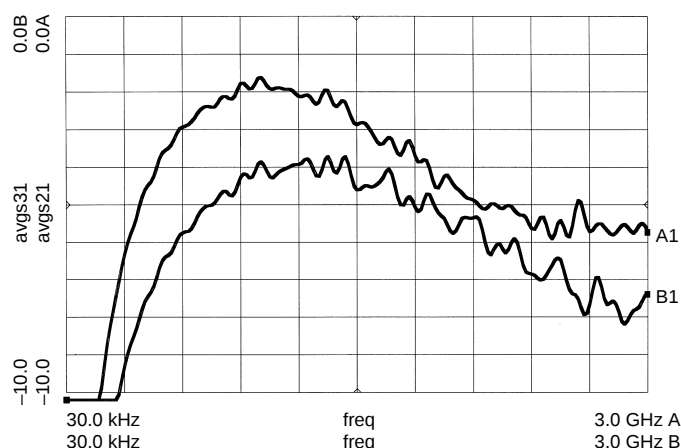
Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating/Storage Temp.	-20°C to +85°C

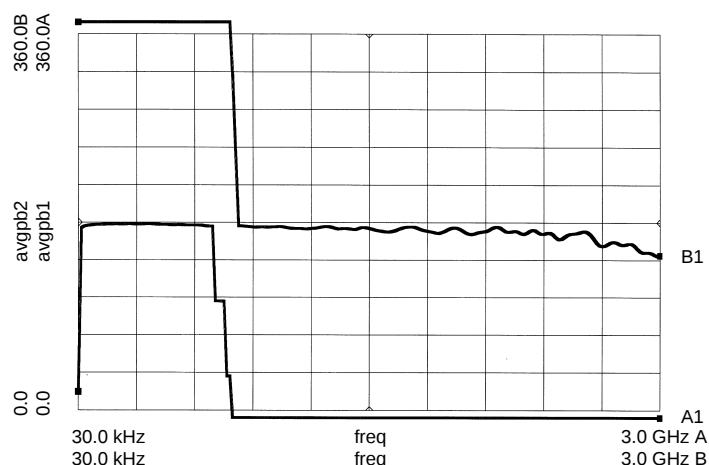
Typical Performance

Over Extended Bandwidth (30 kHz - 3 GHz)

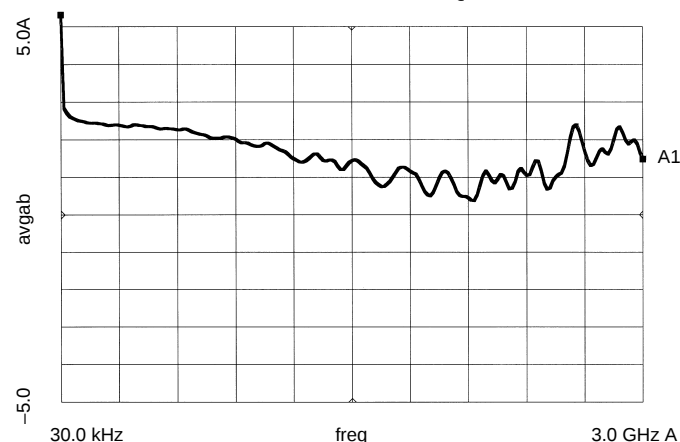
INSERTION LOSS vs FREQUENCY



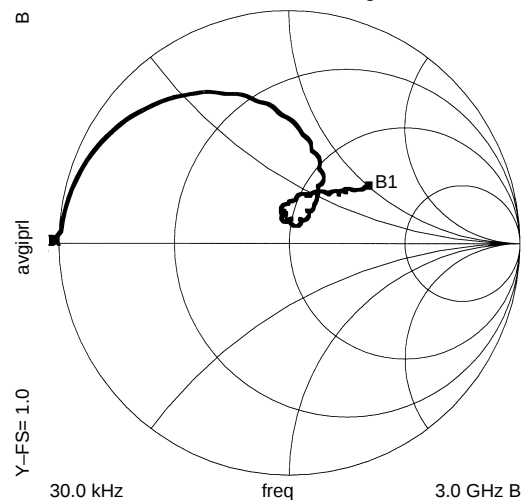
PHASE UNBALANCE vs FREQUENCY



AMPLITUDE UNBALANCE vs FREQUENCY



INPUT IMPEDANCE vs FREQUENCY



Note: All measurements performed on Hewlett Packard 8753D Network Analyzer (201 sample points, linear scale) in a 50 ohm coplanar waveguide environment. Tables created using MDS software.

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