

E-Series RF 4:1 Transformer 500 - 2500 MHz

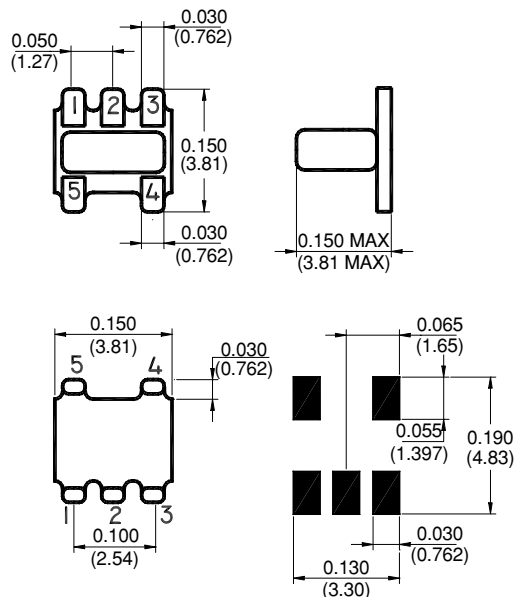


Features

- Surface Mount
- 4:1 Impedance Ratio
- CT on Secondary
- Available on Tape & Reel



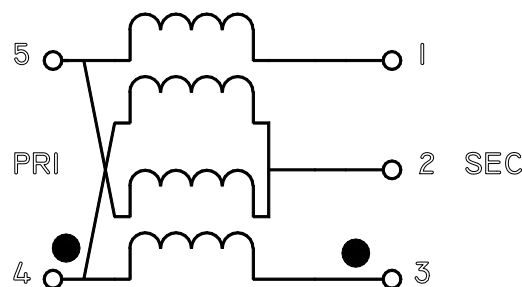
SM-22 Package



Description

M/A-COM's ETC1.6-4-2-3 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



Electrical Specifications @25°C

Parameter	Units	Nominal	Maximum	Mean (x)	Sigma (σ)
Frequency Range 500 - 2500	MHz	—	—	—	—
Insertion Loss ($f_L - f_U$)					
500 - 750 MHz	dB	—	3.0	—	—
750 - 1200 MHz	dB	—	1.0	0.22	0.159
1200 - 2500 MHz	dB	—	3.0	—	—

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

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

Absolute Maximum Ratings

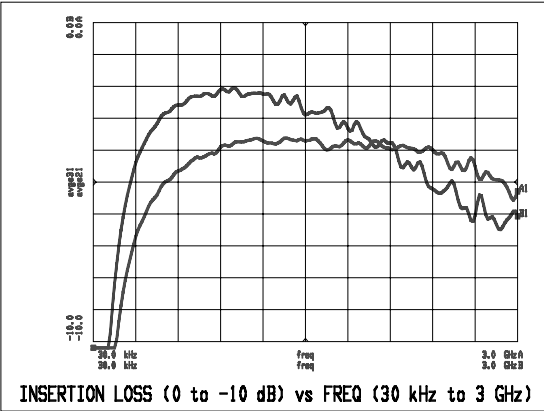
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-30°C to +85°C
Storage Temperature	-30°C to +85°C

Functional Configuration

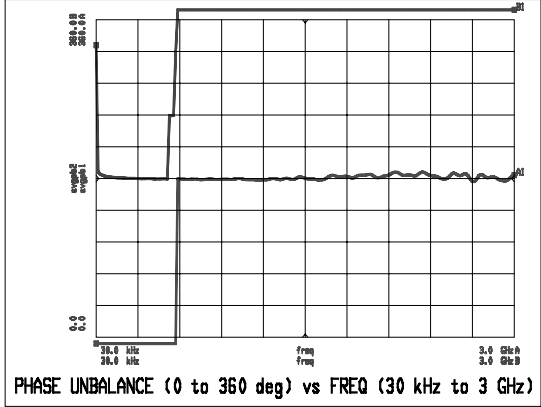
Function	Pin No.
Secondary	1
Secondary CT	2
Secondary Dot	3
Primary Dot	4
Primary	5

Typical Performance Over Extended Bandwidth (30kHz - 3.0GHz)

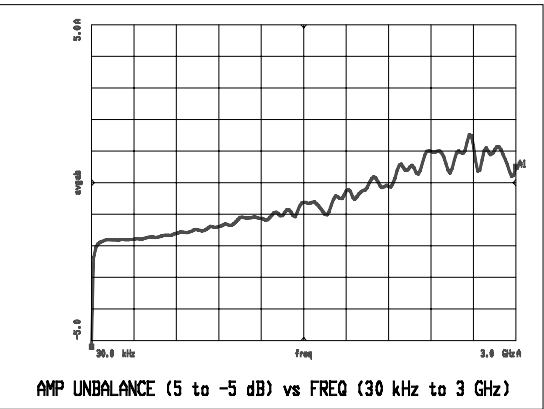
Insertion Loss



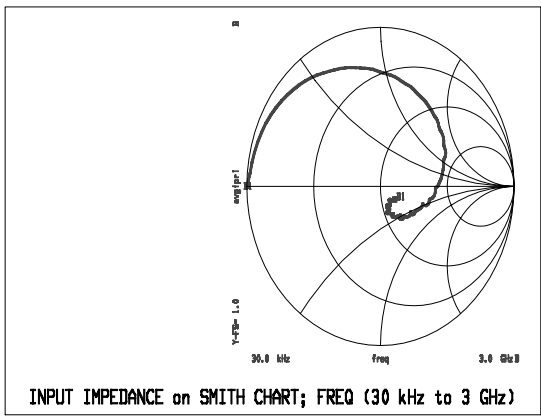
Phase Unbalance



Amplitude Unbalance



Input Impedance



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.

