

ETC1.6-4-2-3



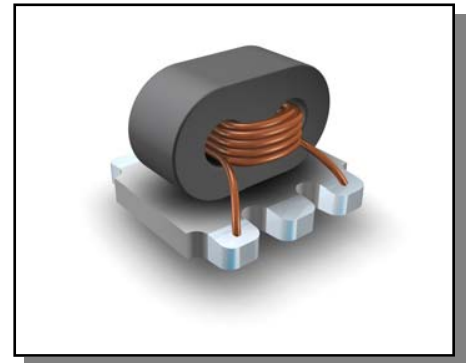
E-Series RF 4:1 Transmission Line Transformer 500-3000MHz

RELEASED

Rev. V2

Features

- Surface Mount
- 4:1 Impedance Ratio
- RoHS* Compliant, lead free
- CT on Secondary
- Available on Tape and Reel



Electrical Specifications @25°C

Parameter	Units	Nominal	Maximum	Mean (x)	Sigma (σ)
Frequency Range 500 - 3000	MHz	—	—	—	—
Insertion Loss ($f_L - f_U$)					
500 - 750 MHz	dB	—	3.0	—	—
750 - 1200 MHz	dB	—	1.0	0.22	0.159
1200 - 3000 MHz	dB	—	3.0	—	—

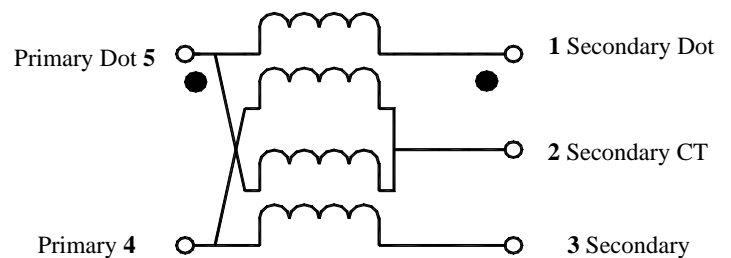
Note: Mean and Sigma calculated from average loss at @ $(f_U - f_L)/2 + f_L$

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

Pin Configuration

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

Schematic



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.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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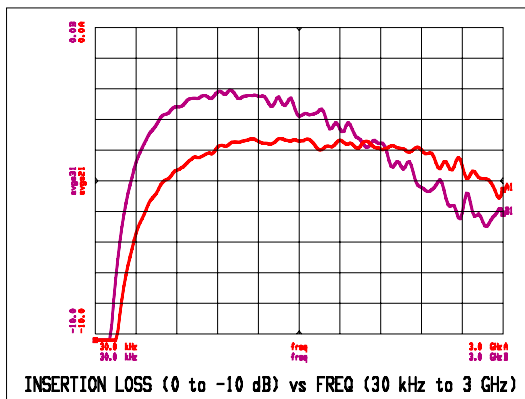
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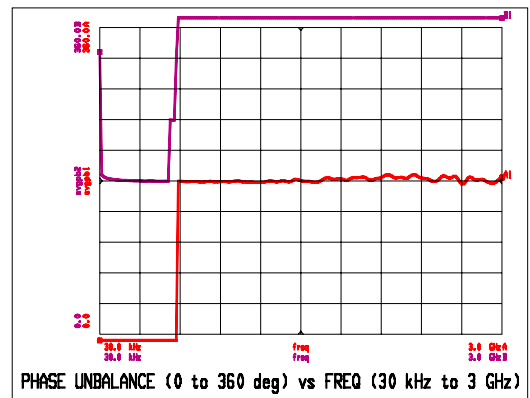
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Typical Performance Over Extended Bandwidth (30kHz - 3.0GHz)

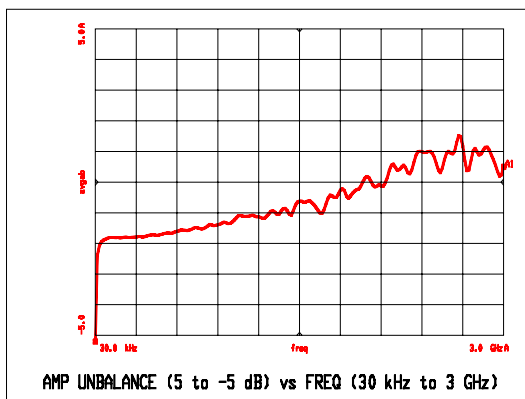
Insertion Loss



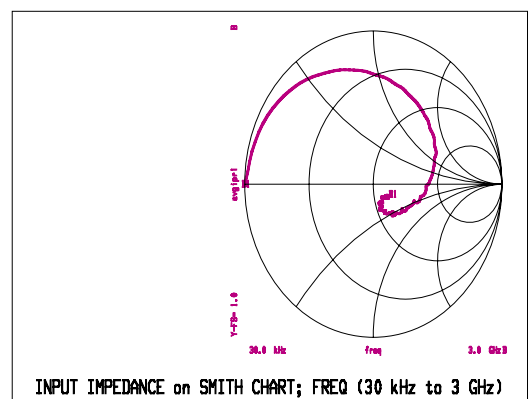
Phase Unbalance



Amplitude Unbalance



Input Impedance



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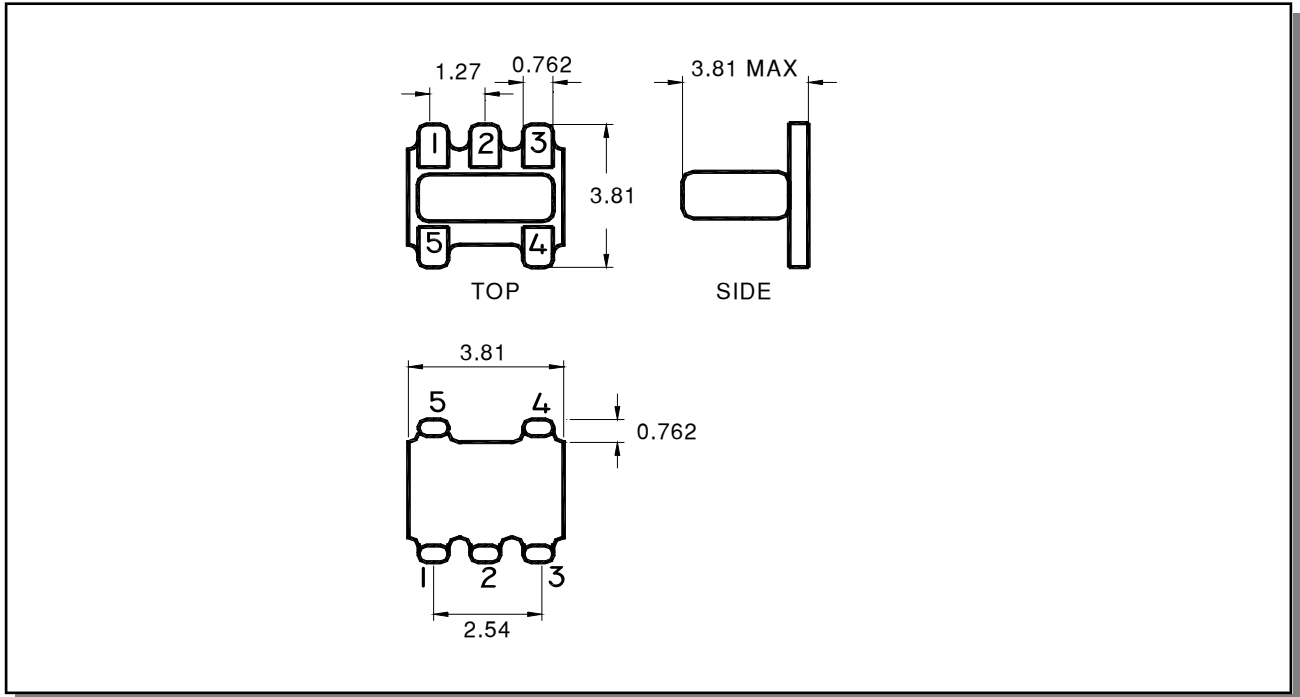


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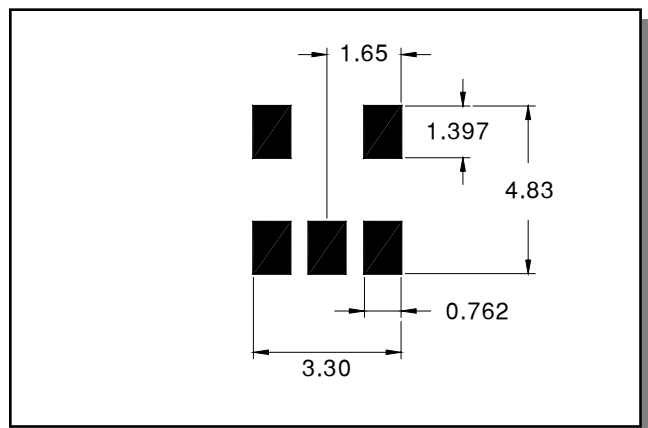
Rev. V2

Outline Drawing



1. Dimensions in mm.
2. Tolerance: ± 0.2 mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Termination plating is Au.

Recommended Footprint



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Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Ao	mm	4.39
Bo	mm	4.35
Ko	mm	3.67
Reference Application Note ANI-019 for orientation		

Ordering Information

Part Number	Description
ETC1.6-4-2-3	2000 piece reel
ETC1.6-4-2-3TB	Customer Test Board

Recommended Maximum Ratings

Parameter	Value
RF power	250mW
DC current	30mA
Operating Temperature	-30°C to +85°C
Storage Temperature	-30°C to +85°C

ECO History

Rev	Date	Description	By
V2	13 May 2010	Corrected the dimensions on case style drawing and changed to the new format	CB