

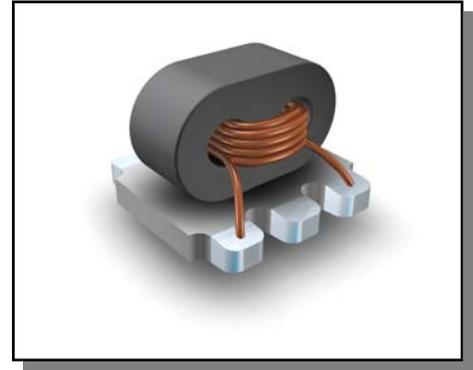
E-Series RF 4:1 Transmission Line Transformer 500-3000MHz

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 | — | — |

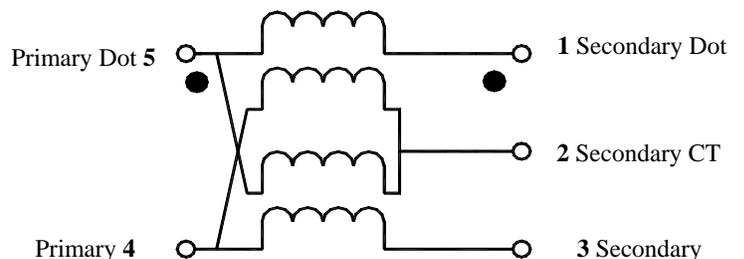
Note: Mean and Sigma calculated from average loss at @ $(f_U - f_L)/2 + f_L$

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

Pin Configuration

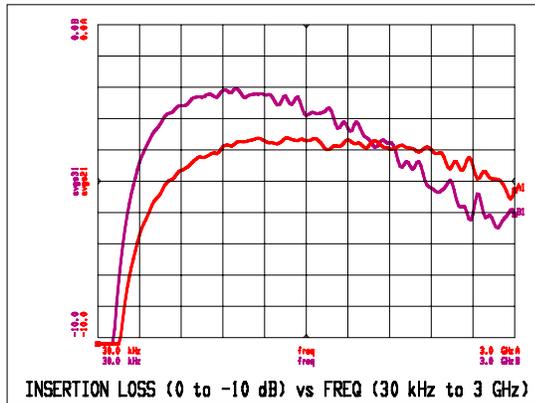
| Pin No. | Function |
|---------|---------------|
| 1 | Secondary Dot |
| 2 | Secondary CT |
| 3 | Secondary |
| 4 | Primary |
| 5 | Primary Dot |

Schematic

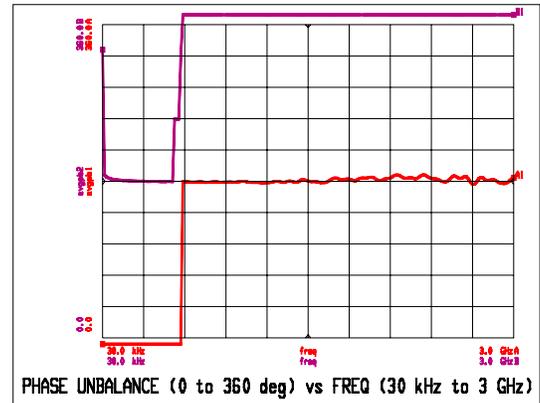


Typical Performance Over Extended Bandwidth (30kHz - 3.0GHz)

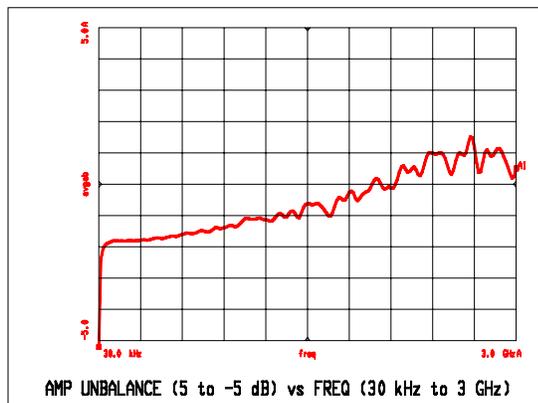
Insertion Loss



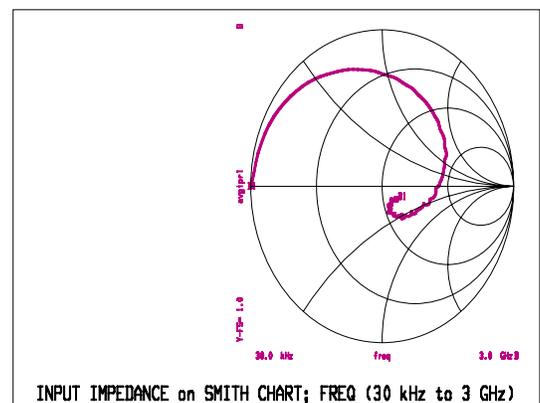
Phase Unbalance



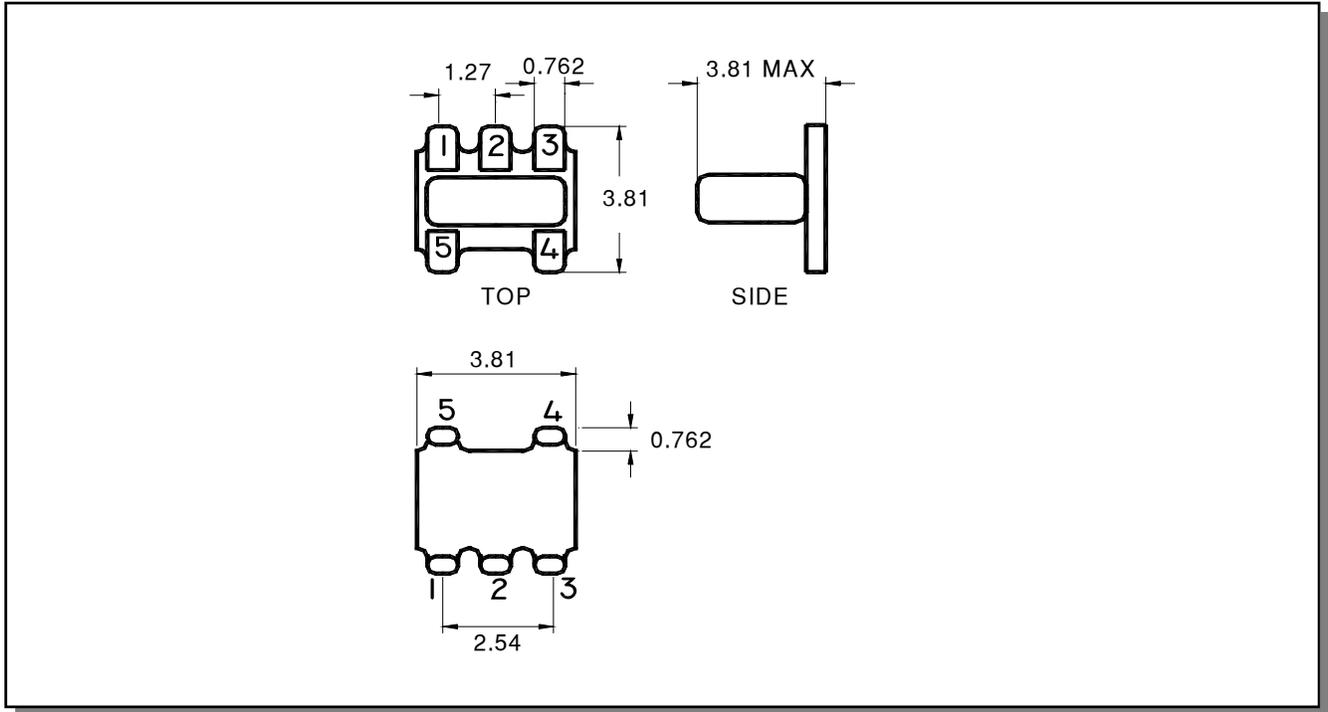
Amplitude Unbalance



Input Impedance

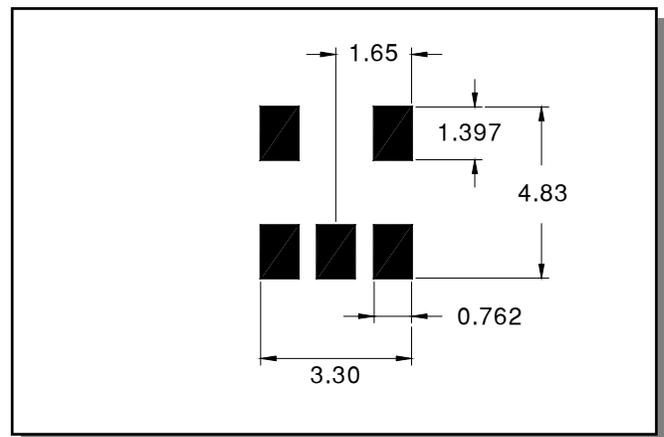


Outline Drawing



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



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 |
| | | | |
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