



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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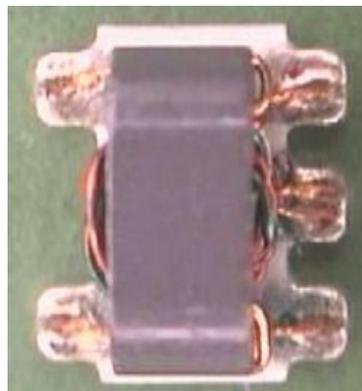
Features

- 1:4 Impedance Ratio
- CT on Secondary
- Surface Mount
- Tape and reel packaging available
- RoHS* Compliant, Pb Free
- Termination finish - Sn

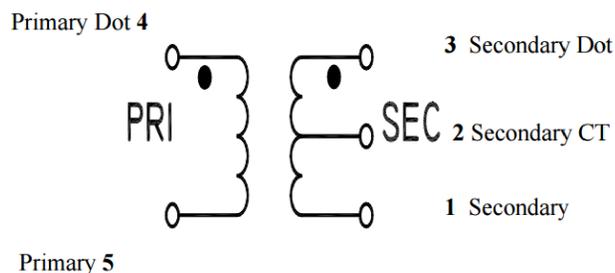
Description

The ETC4-1-2 is a 1:4 RF flux coupled step-up 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. Parts are packaged in tape & reel.



Functional Schematic



Ordering Information

Part Number	Package
ETC4-1-2TR	2000 piece reel

Pin Configuration

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

* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

Electrical Specifications: $T_A = +25^\circ\text{C}$, $Z_0 = 50 \Omega$

Parameter	Test Conditions	Frequency (MHz)	Units	Min.	Typ.	Max.
RF Frequency	—	2 - 800	MHz	—	—	—
Insertion Loss	$F_L - F_U$	10 - 100 5 - 600 2 - 800	dB	—	— 1.21 —	1.0 2.0 3.0
Amplitude Unbalance	—	10 - 100 2 - 800	dB	—	—	0.25 1.0
Phase Unbalance	—	10 - 500 2 - 800	Degrees	—	—	2.0 10.0

Absolute Maximum Ratings

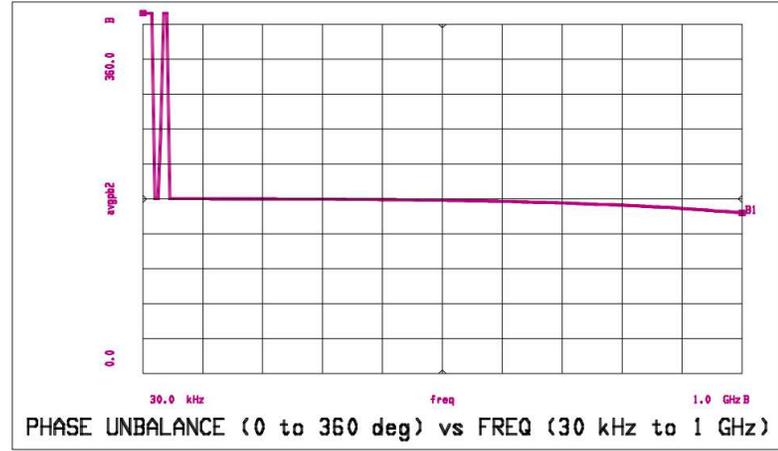
Parameter	Absolute Maximum
DC Power	250 mW
DC Current	30 mA
Operating Temperature	-55°C to $+85^\circ\text{C}$

Typical Performance Curves

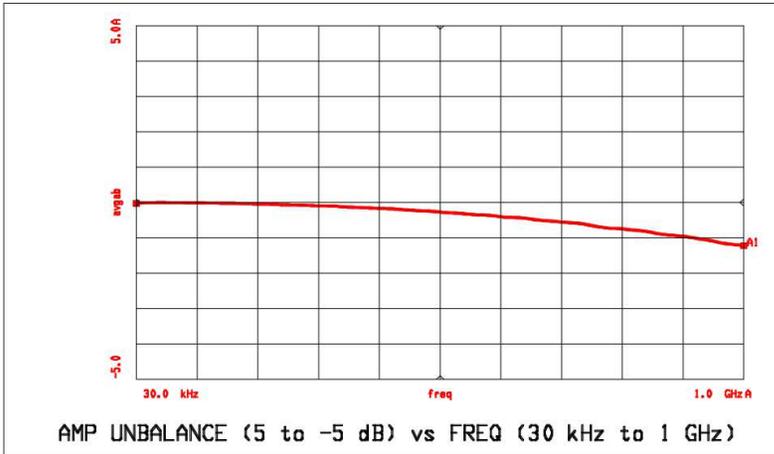
Insertion Loss



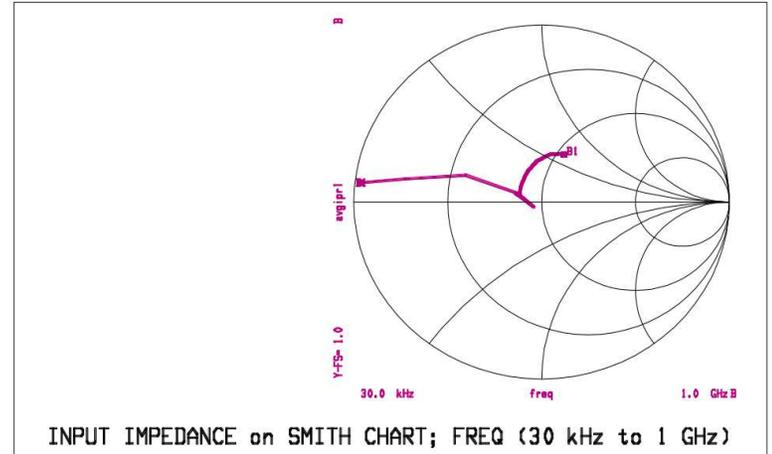
Phase Unbalance



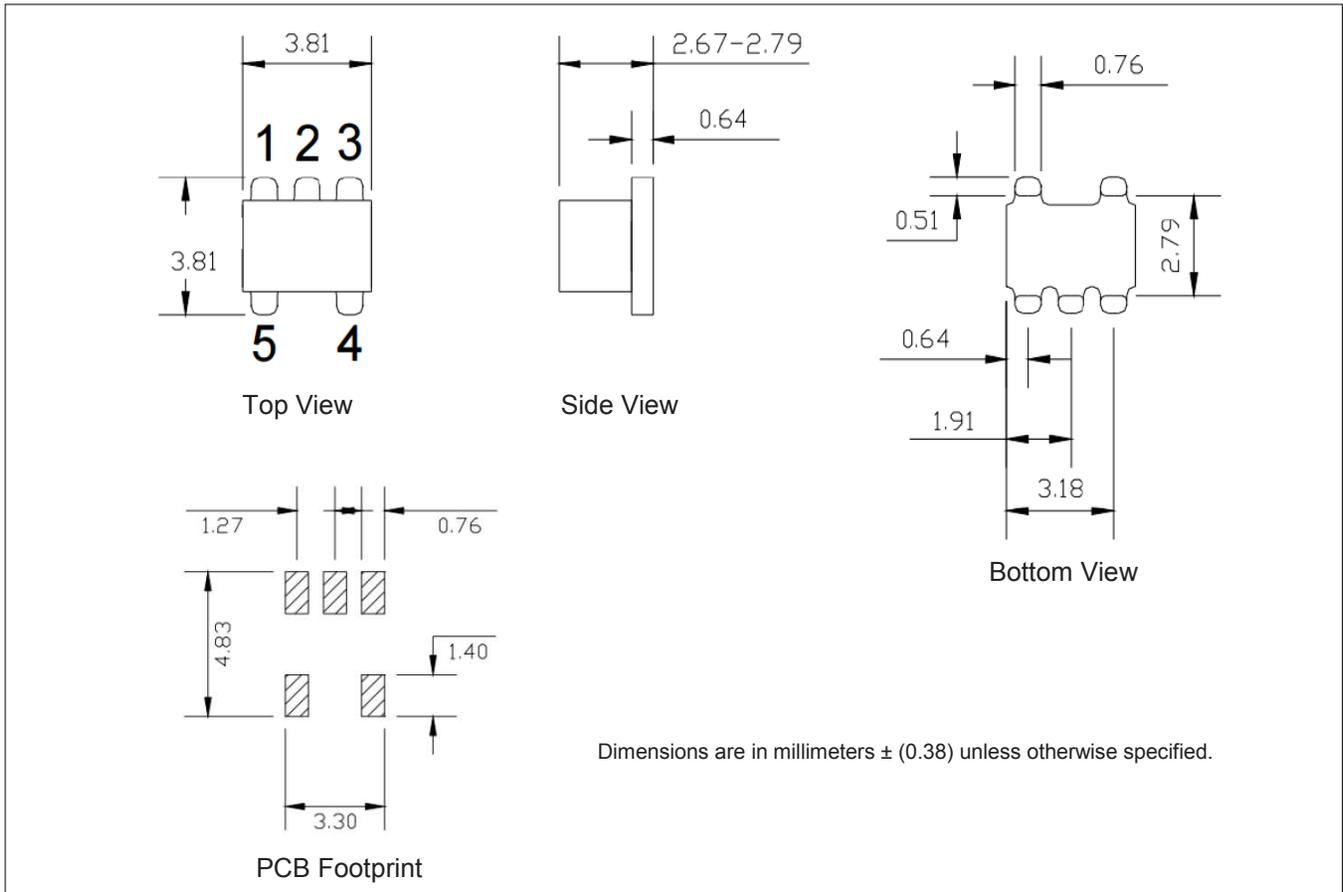
Amplitude Unbalance



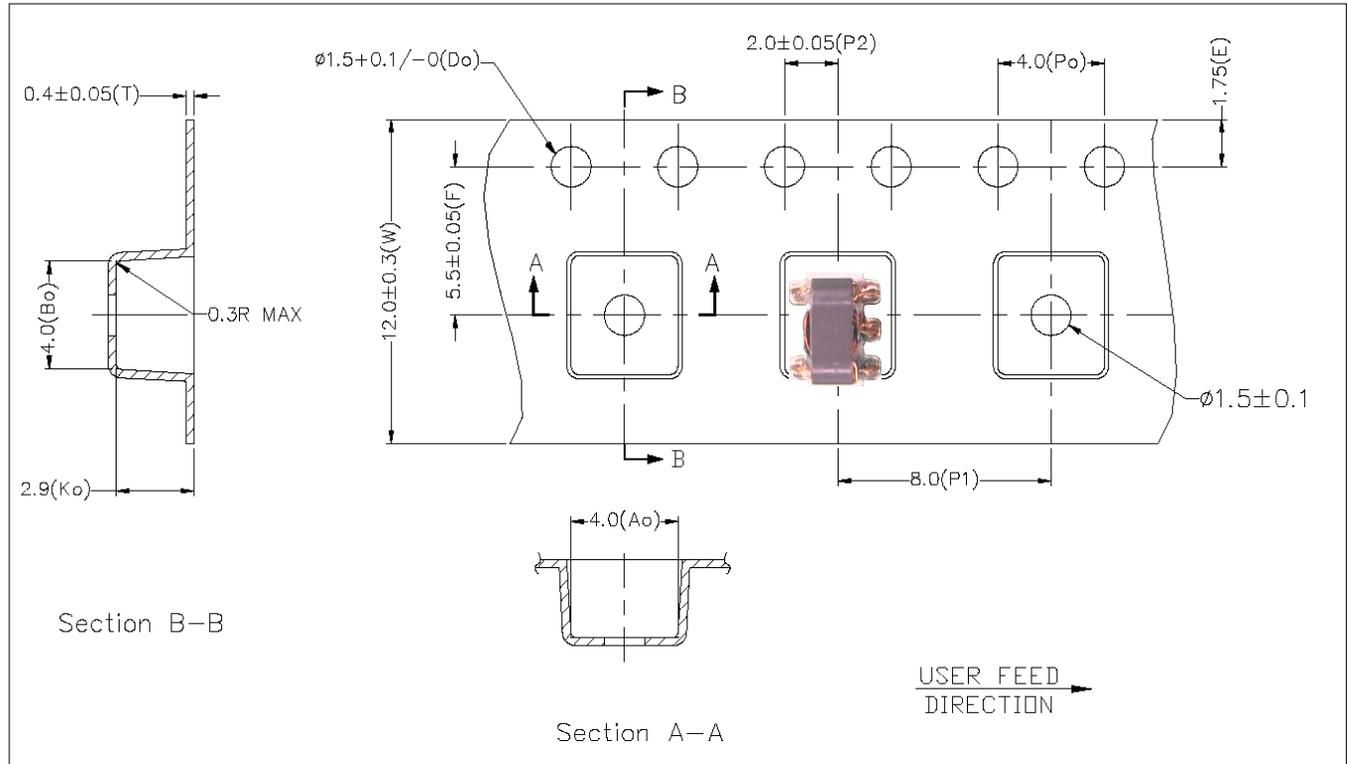
Input Impedance



Outline Drawing & Recommended Footprint



Tape & Reel Information



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	4.00
Bo	mm	4.00
Ko	mm	2.90
Orientation	—	F5
See Page 5 for orientation in tape.		

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