



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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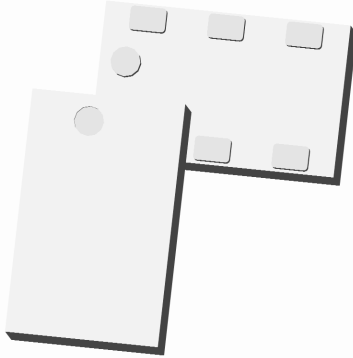




### Impedance Matched Ultra Low profile 0805 Balun for TI CC1101/1100 chipset (Anaren Application Note Ann-2005)

#### Description

The B0809J50ATI is a low cost, low profile sub-miniature unbalanced to balanced transformer specifically designed for differential inputs and output locations Texas Instruments CC1100 and CC1101 SoC Solution in an easy to use surface mount package. The B0809J50ATI is ideal for high volume manufacturing and delivers higher performance than traditional ceramic baluns. This transformation enables single ended signals to be applied to differential ports on the CC1100/CC1101. The output ports have equal amplitude (-3dB) with 180 degree phase differential. The B0809J50ATI is available on tape and reel for pick and place high volume manufacturing.

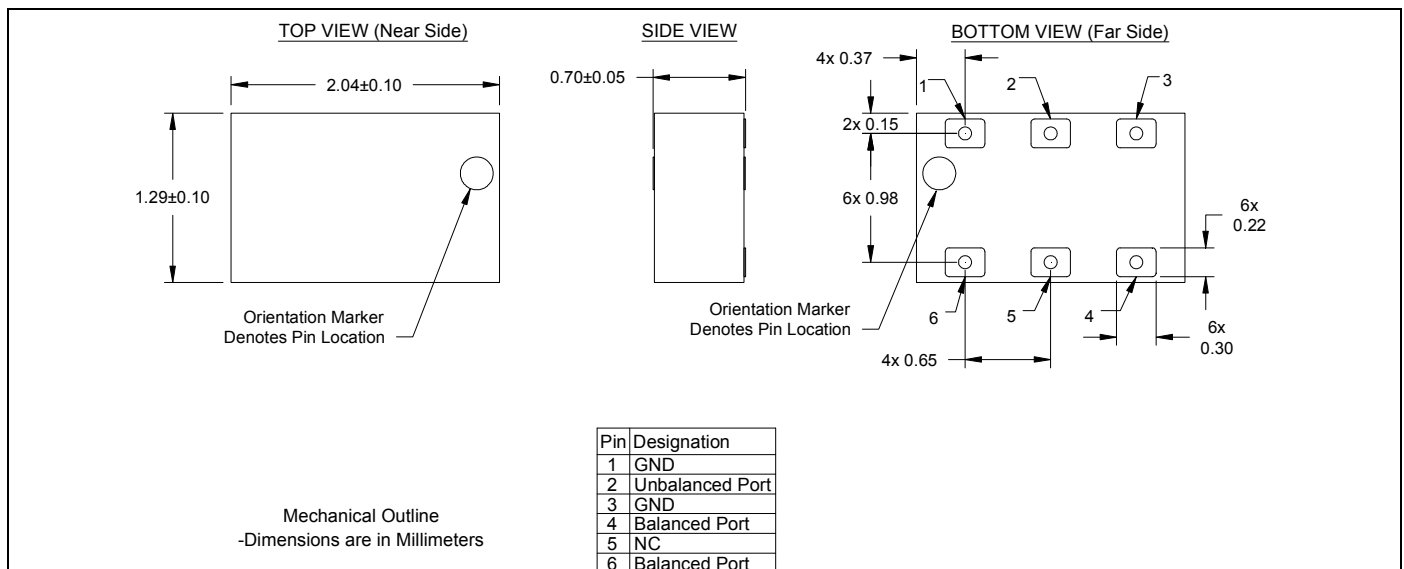


**Detailed Electrical Specifications:** Specifications subject to change without notice.

Features:	Parameter	ROOM (25°C)			Unit
		Min.	Typ.	Max	
<ul style="list-style-type: none"> <li>850 – 915 MHz</li> <li>Matched to TI CC1100 &amp; CC1101 SoC</li> <li>0.7mm Height Profile</li> <li>Low Insertion Loss</li> <li>Surface Mountable</li> <li>Tape &amp; Reel</li> <li>Non-conductive Top Surface</li> <li>RoHS Compliant</li> <li>Zigbee, RF4CE</li> <li>Halogen Free</li> </ul>	Frequency	850		915	MHz
	Unbalanced Port Impedance*		50		Ω
	Balanced Port Impedance*		Matched		Ω
	Return Loss*	15.3	18.0		dB
	Insertion Loss**		0.5	0.6	dB
	Power Handling			2.0	Watts
	Operating Temperature		-55		+85

\*Specification based on performance of unit properly installed on microstrip printed circuit boards according to Anaren application note Ann-2005.  
 \*\* Insertion Loss stated at room temperature (Insertion Loss is approximately 0.1dB higher at +85°C)

#### Outline Drawing

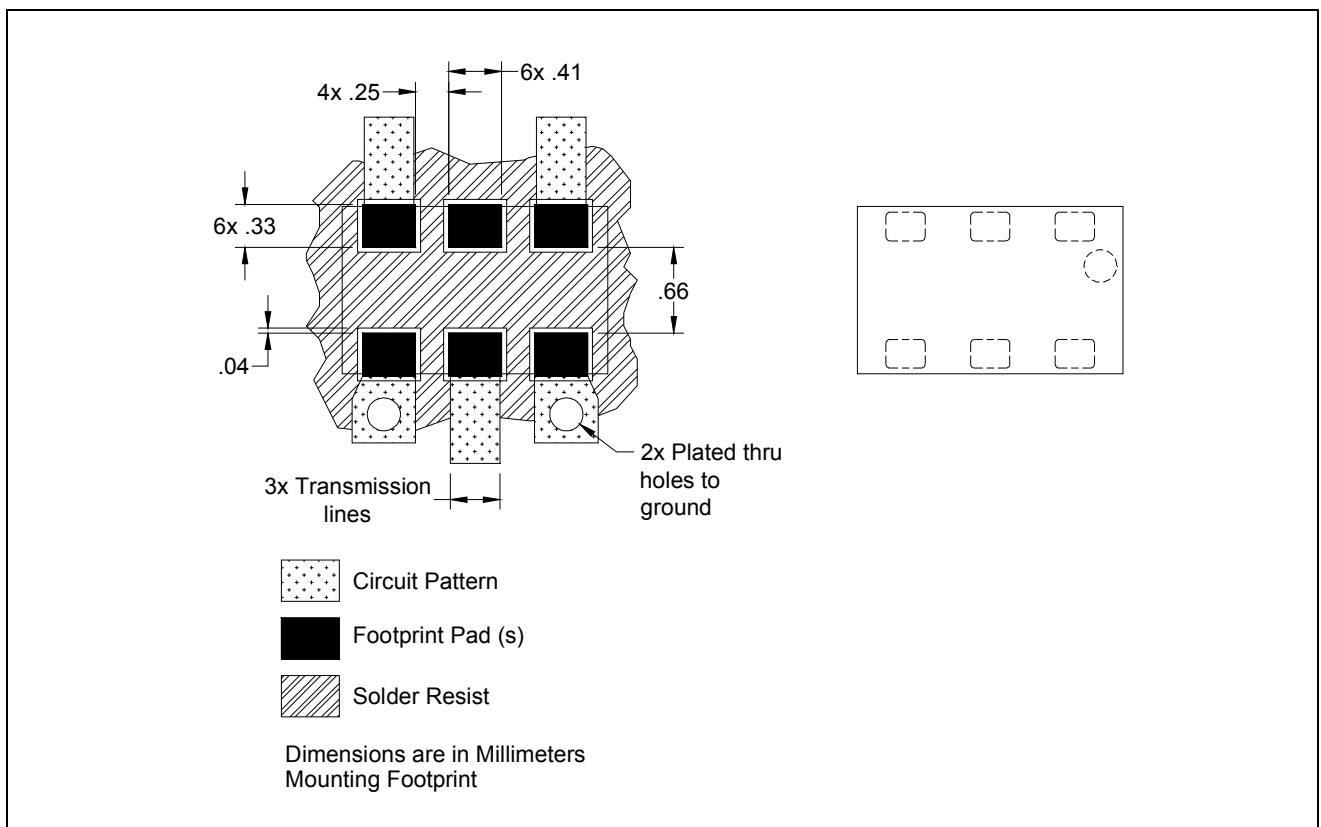


## Mounting Configuration:

In order for Xinger surface mount components to work optimally, the proper impedance transmission lines must be used to connect to the RF ports. If this condition is not satisfied, insertion loss, Isolation and VSWR may not meet published specifications.

All of the Xinger components are constructed from organic PTFE based composites which possess excellent electrical and mechanical stability. Xinger components are compliant to a variety of ROHS and Green standards and ready for Pb-free soldering processes. Pads are Gold plated with a Nickel barrier.

An example of the PCB footprint used in the testing of these parts is shown below. In specific designs, the transmission line widths need to be adjusted to the unique dielectric coefficients and thicknesses as well as varying pick and place equipment tolerances.



### Packaging and Ordering Information

Parts are available in reel and are packaged per EIA 481-2. Parts are oriented in tape and reel as shown below. Minimum order quantities are 4000 per reel. See Model Numbers below for further ordering information.

