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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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# High Frequency Ceramic Solutions

**868MHz Impedance Matched/Balun/BPF Integrated Component for T.I. CC110X, P/N 0868BM15C0001  
CC111X, CC113X and CC115X, CC110L, CC113L, CC115L, CC430 and RF430**

Detail Specification: 09/09/2011

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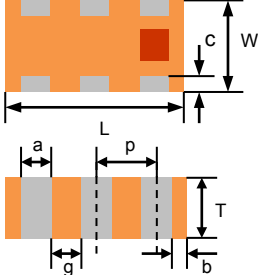
General Specifications			
Part Number	0868BM15C0001	Insertion Loss	2.1 dB max.
Operating Frequency	863 - 873 (MHz)	Return Loss	9.5 dB min.
Unbalanced Impedance	50 Ω	Phase Difference	180° ± 15
Balanced Impedance	Impedance-Matched to T.I. CC110X, CC111X, CC113X and CC115X, CC110L, CC113L, CC115L, CC430 and RF430 Chipsets	Amplitude Difference	1.5 dB max.
		Input Power	1W max. (CW)
		Reel Quantity	4,000
Attenuation*	10 dB min. @ 699MHz	Operating Temperature	-40 to +85°C
	30 dB min. @ 1736MHz	Storage Temperature Range	+5 ~ +35 °C, Humidity 45~75%RH, 18 months. 1 week max after opened**
	30 dB min. @ 2604MHz		
	35 dB min. @ 3472MHz		
30 dB min. @ 4340MHz			

\* Band Pass Filtering

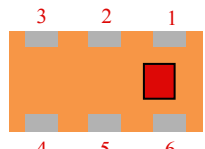
\*\*For more info go to [www.johansontechnology.com/silverleads](http://www.johansontechnology.com/silverleads)

Part Number Explanation				
P/N Suffix	Packing Style	Bulk	Suffix = S	Eg. 0868BM15C0001S
		T & R	Suffix = E	Eg. 0868BM15C0001E
	Termination style	AgPt	Suffix = None	Eg. 0868BM15C0001 (E or S)
	Evaluation Board	0868BM15C0001-EBSMA		

Mechanical Dimensions		
	In	mm
L	0.079 ± 0.004	2.00 ± 0.10
W	0.049 ± 0.004	1.25 ± 0.10
T	0.028 ± 0.004	0.70 ± 0.10
a	0.012 ± 0.004	0.30 ± 0.10
b	0.008 ± 0.004	0.20 ± 0.10
c	0.012 +.004/- .008	0.30 +0.1/-0.2
g	0.014 ± 0.004	0.35 ± 0.10
p	0.026 ± 0.002	0.65 ± 0.05



Terminal Configuration			
No.	Function	No.	Function
1	Unbalanced Port	4	Balanced Port***
2	GND	5	GND
3	Balanced Port***	6	GND



\*\*\*Balanced ports are DC-Blocked from pins 1-2-5-6, capacitor is embedded. No need for external DC-Blocking cap at GND pins or unbalanced port.

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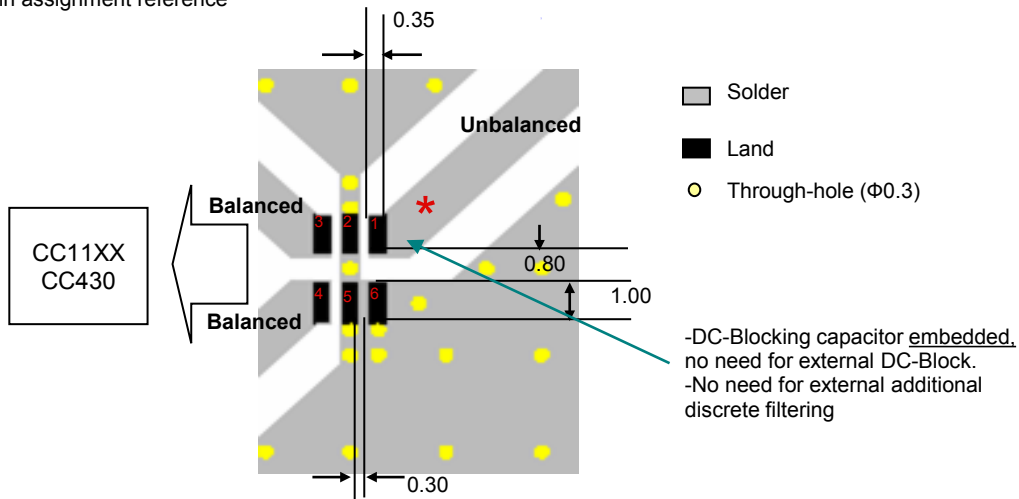
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## Mounting Considerations

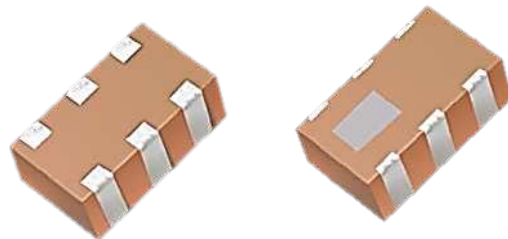
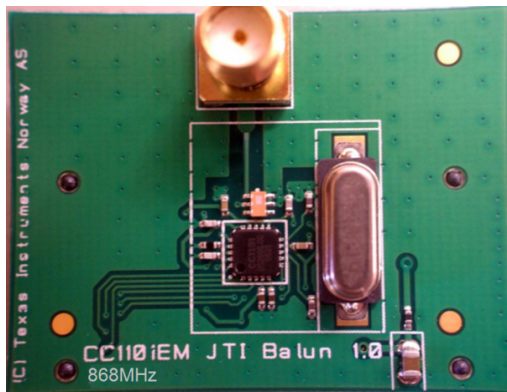
Mount these devices with brown mark facing up. Units: mm

\* Unbalanced trace/port must exhibit a 50Ω characteristic impedance

# Pin assignment reference



To obtain application notes, information how to implement this component, or obtain gerber files, go to: [www.johansontechnology.com/ti](http://www.johansontechnology.com/ti) or contact our Apps Engineering Team at: [www.johansontechnology.com/component/techquestion/?Itemid=407](http://www.johansontechnology.com/component/techquestion/?Itemid=407)



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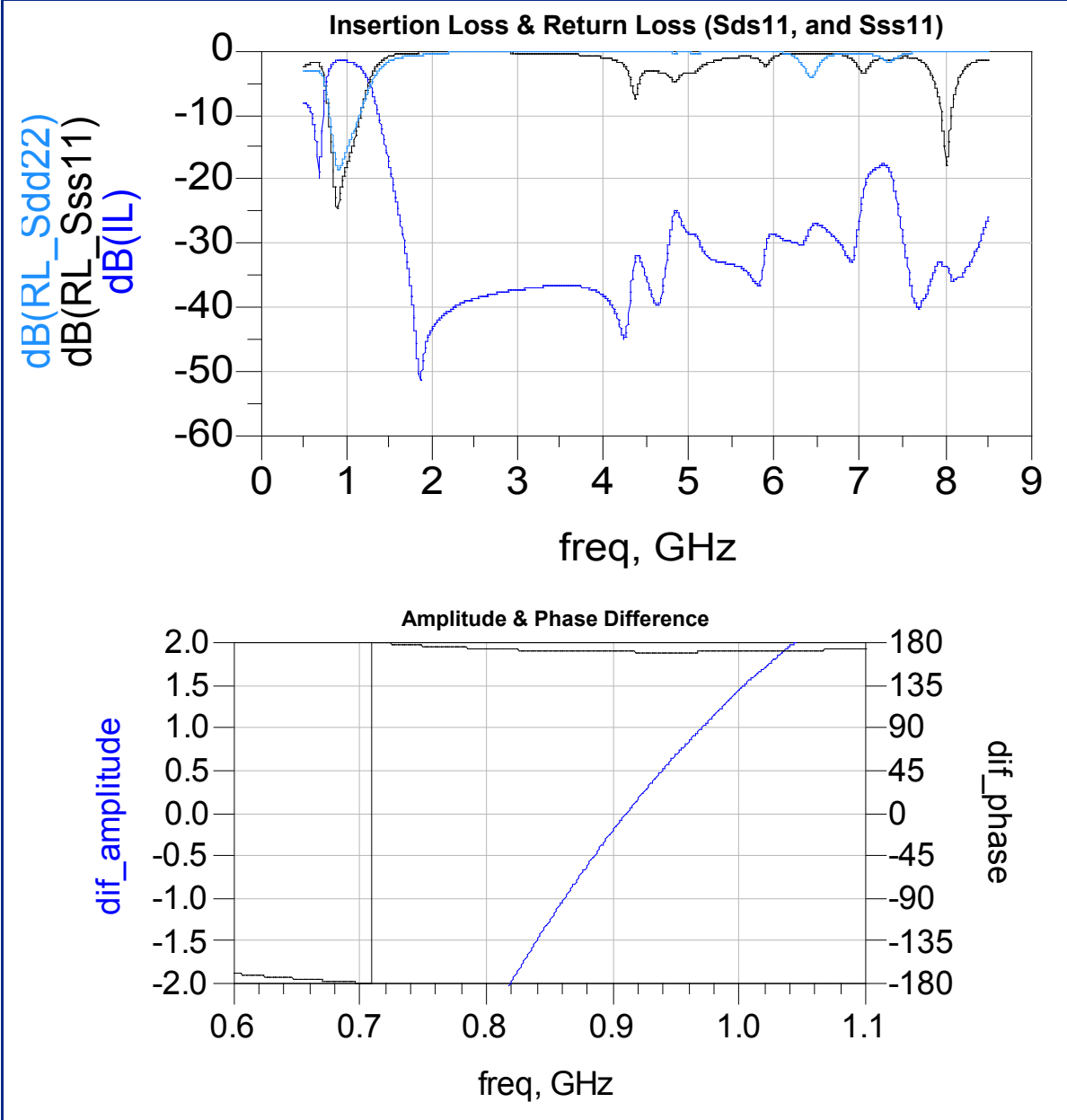
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## Typical Electrical Performance (T=25°C)



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P/N 0868BM15C0001

Detail Specification: 7/8/2014

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## RoHS Compliance

[www.johansontechnology.com/technical-notes/rohs-compliance.html](http://www.johansontechnology.com/technical-notes/rohs-compliance.html)

## Packaging information

[www.johansontechnology.com/ipcpackaging.html](http://www.johansontechnology.com/ipcpackaging.html)

## Soldering Information

[www.johansontechnology.com/ipcsoldering-profile](http://www.johansontechnology.com/ipcsoldering-profile)

## Antenna layout and tuning techniques

[www.johansontechnology.com/tuning](http://www.johansontechnology.com/tuning)

## Antenna layout review, tuning, and characterization services

[www.johansontechnology.com/ipcantennaservices](http://www.johansontechnology.com/ipcantennaservices)

## Pad metalization information

[www.johansontechnology.com/silverleads](http://www.johansontechnology.com/silverleads)

## MSL Info

[www.johansontechnology.com/technical-notes/msl-rating.html](http://www.johansontechnology.com/technical-notes/msl-rating.html)

## Recommended Storage Condition and Max Shelf Life

[www.johansontechnology.com/ipcstorage-shelflife](http://www.johansontechnology.com/ipcstorage-shelflife)

## Application Notes, Layout Files, and more

[www.johansontechnology.com/ti.html](http://www.johansontechnology.com/ti.html)

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