

# "High Frequency Ceramic Solutions"

868/915 MHz Impedance Matched/Balun/LPF Integrated Component for T.I. CC110X, P/N 0896BM15A0001  
 CC111X, CC113X and CC115X, CC110L, CC113L, CC115L, CC430 and RF430

Detail Specification: 7/8/2014

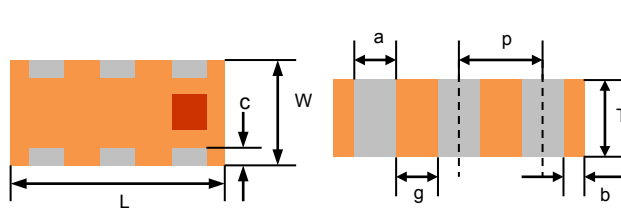
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General Specifications			
Part Number	0896BM15A0001	Return Loss	9.5 dB min.
Frequency (MHz)	863 - 928 Mhz	Phase Difference	180° ± 10
Unbalanced Impedance	50 Ω	Amplitude Difference	1.5 dB max.
Differential Balanced Impedance	Impedance-Matched to T.I. CC110X, CC111X, CC113X and CC115X, CC110L, CC113L, CC115L, CC430 and RF430 Chipsets	Operating Temperature	-40 to +125°C
		Power Rating	1W max. (CW)
Insertion Loss 1	1.5 dB max (-40C to +85C)	Reel Quantity	4,000
Insertion Loss 2	1.55 dB max (-40C to +125C)	Recommended Storage Conditions	+5 ~ +35 °C, Humidity 45~75%RH
Attenuation (min.)	25 min @ 1726 - 1856MHz	Storage Period	18 months max sealed. 1 week max after opened*
	35 min.@ 2589 - 2784MHz		
	35 min.@ 3452 - 3712MHz	Moisture Sensitivity Level	1
	35 min.@ 4315 - 4640MHz		

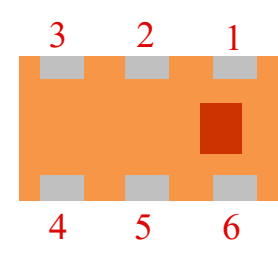
\*For more info go to [www.johansontechnology.com/silverleads](http://www.johansontechnology.com/silverleads)

Part Number Explanation				
P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 0896BM15A0001S
		T & R	Suffix = E	eg. 0896BM15A0001E
	Termination style	AgPt	Suffix = None	eg. 0896BM15A0001(E or S)
	Evaluation Board	0896BM15A0001-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/-0.008	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
1	Unbalanced Port
2	GND
3	Balanced Port
4	Balanced Port
5	GND
6	GND




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Ver 2.2

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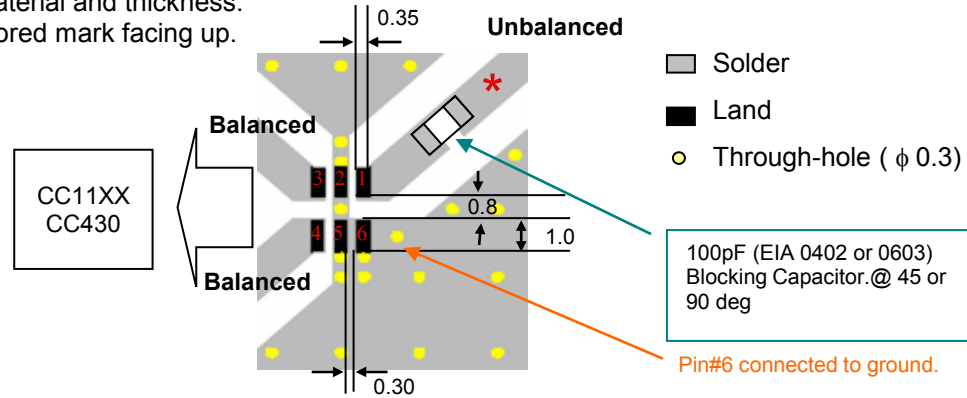
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## Mounting Considerations

\* Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

Mount device with colored mark facing up.

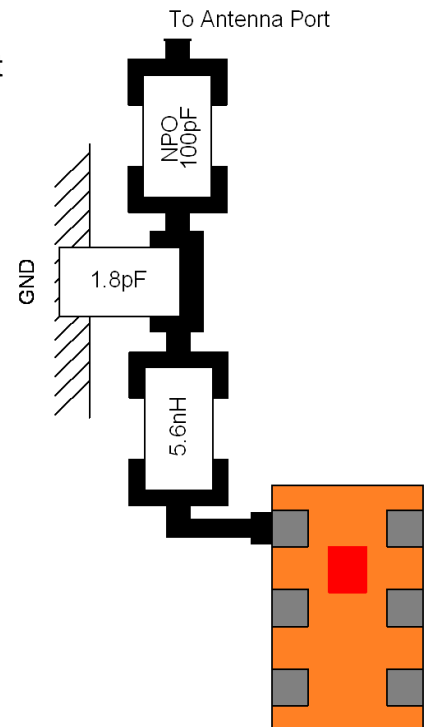
# Pin reference



Units: mm

Additional output filtering may be required depending on output power in order to comply with FCC and/or ETSI regulations  
Mount device with colored mark facing up.

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)



Component P/N:  
5.6nH Inductor: L-07C5N6SV6T  
1.8pF Capacitor: 500R07S1R8BV4T

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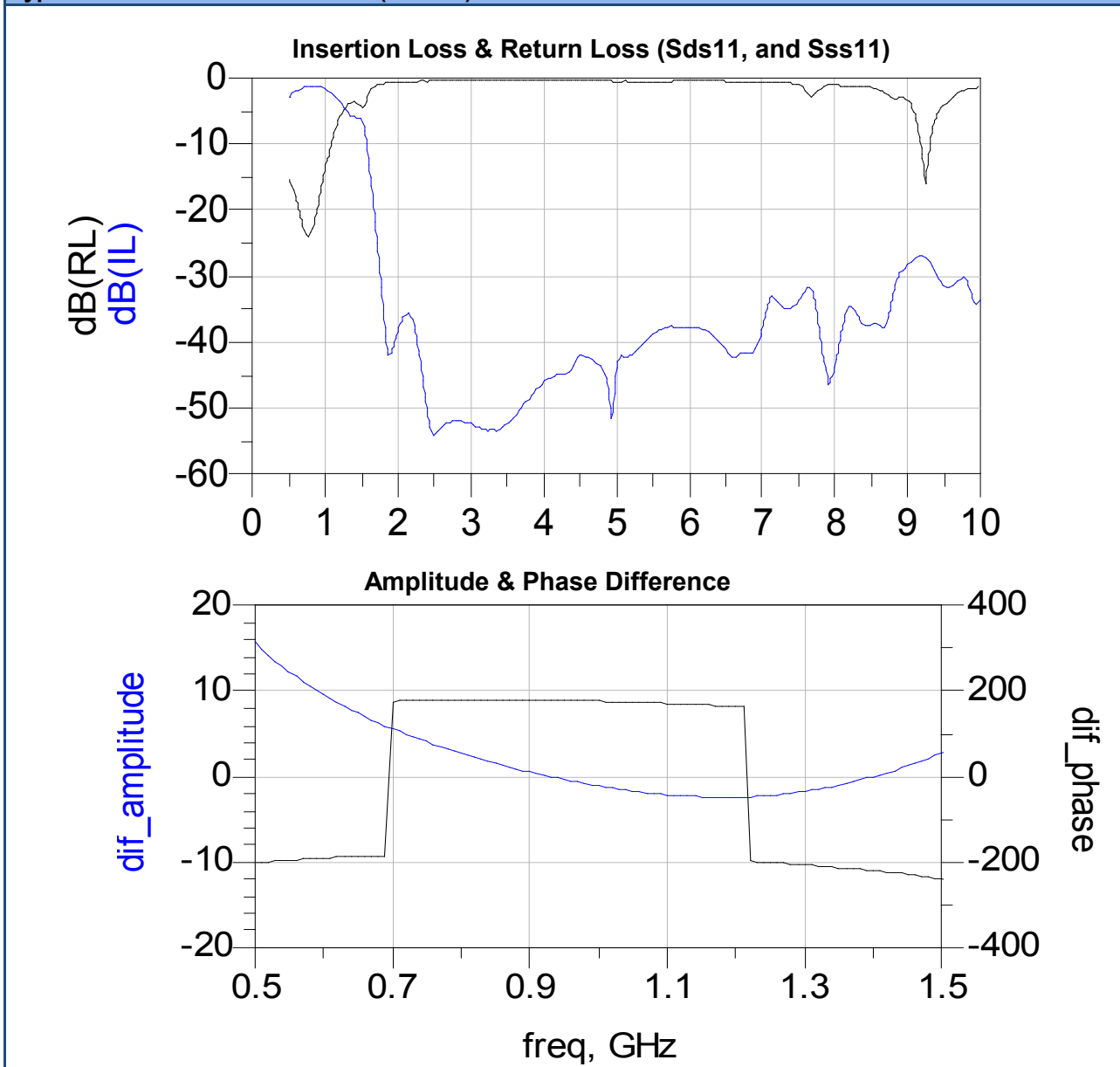
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## Typical Electrical Characteristics (T=25°C)



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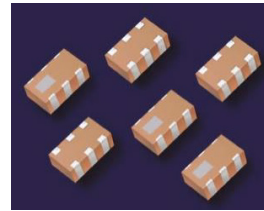
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## Appearance



## 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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