


"High Frequency Ceramic Solutions"

430/403 MHz Impedance Matched Balun/LPF Integrated Component for T.I. Chipsets: CC1100, CC1101, CC110L, CC1111, CC1130, CC1131, CC1150, CC1151, CC113L, CC115L, CC430 and RF430.

P/N 0433BM15A0001

Detail Specification: 10/27/2015

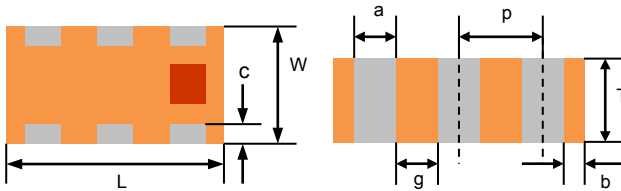
Page 1 of 4

General Specifications			
Part Number	0433BM15A0001	This balun-filter works great with 430/433MHz ISM, 403.5MHz MICS bands and any frequencies in between	
Balanced Impedance	Impedance-Matched to T.I. CC110X, CC111X, CC113X and CC115X, CC110L, CC113L, CC115L, CC430 and RF430 Chipsets		
Unbalanced Impedance	50 Ω		
Recommended Storage Conditions	+5 ~ +35 °C, Humidity 45~75%RH, 18 months. 1 week max after opened*	Input Power	1W max. (CW)
Frequency 1 (MHz)	430 - 435	Reel Quantity	4,000
Insertion Loss 1	1.9 dB max.	Frequency 2 (MHz)	402 - 405
Attenuation 1 (min.)	34 min. @ 2FO	Insertion Loss 2	1.9 dB max.
	35 min. @ 3FO	Attenuation 2 (min.)	25 min. @ 2FO
	35 min. @ 4FO		35 min. @ 3FO
	35 min. @ 5FO		35 min. @ 4FO
	35 min. @ 5FO		
Return Loss 1	9.5min	Return Loss 2	9.5 dB max.
Phase Difference 1	180° ± 10	Phase Difference 2	180° ± 10
Amplitude Difference 1	1.5 dB max.	Amplitude Difference 2	3.0 dB max.
		Operating Temperature	-40 to +85°C

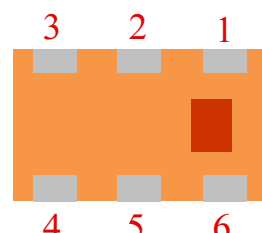
*For more info go to www.johansontechnology.com/silverleads

Part Number Explanation			
P/N Suffix	Packing Style	Bulk	Suffix = S eg. 0433BM15A0001S
		T & R	Suffix = T eg. 0433BM15A0001E
	Termination style	AgPt	Suffix = None eg. 0433BM15A0001(E or S)

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 + +0.004/-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



**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.



4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver 2.2

2014 Johanson Technology, Inc. All Rights Reserved

www.johansontechnology.com

"High Frequency Ceramic Solutions"

430/403 MHz Impedance Matched Balun/LPF Integrated Component for T.I. Chipsets: CC1100, CC1101, CC110L, CC1111, CC1130, CC1131, CC1150, CC1151, CC113L, CC115L, CC430 and RF430.

P/N 0433BM15A0001

Detail Specification: 10/27/2015

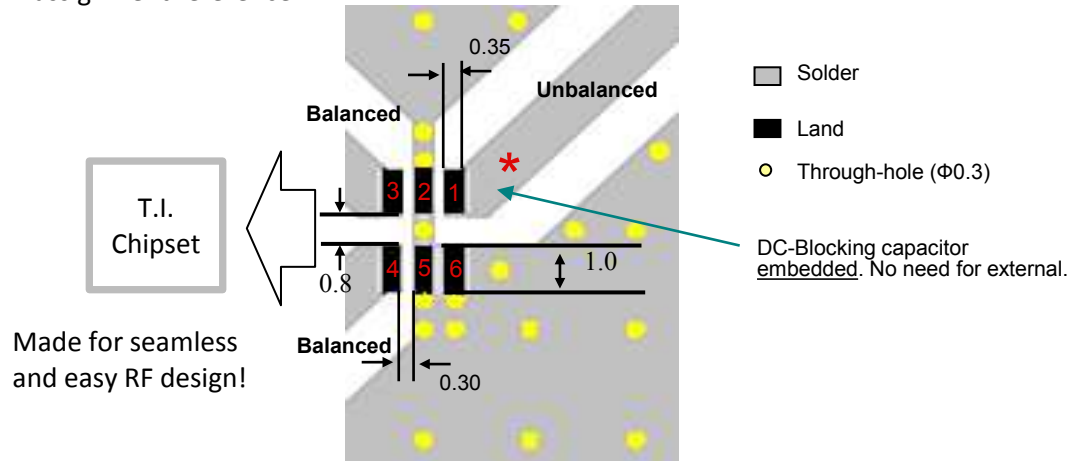
Page 1 of 3

Mounting Considerations

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

*Line width should be designed to provide 50 Ω impedance matching characteristics.

Pin assignment reference



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



Johanson Technology, Inc. reserves the right to make design changes without notice. Please confirm the specifications and delivery conditions when placing your order. All sales are subject to Johanson Technology, Inc. terms and conditions.

JOHANSON
TECHNOLOGY



www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver 2.2

2014 Johanson Technology, Inc. All Rights Reserved

"High Frequency Ceramic Solutions"

430/403 MHz Impedance Matched Balun/LPF Integrated Component for T.I. Chipsets: CC1100, CC1101, CC110L, CC1111, CC1130, CC1131, CC1150, CC1151, CC113L, CC115L, CC430 and RF430.

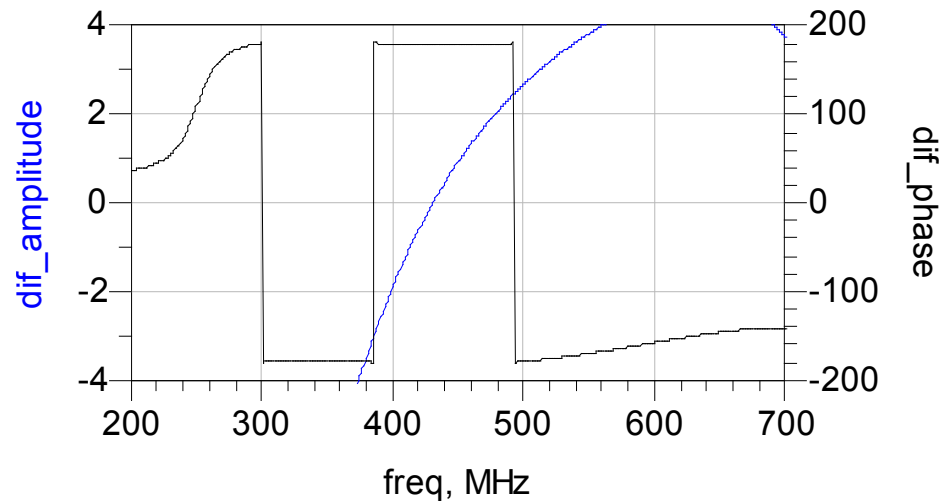
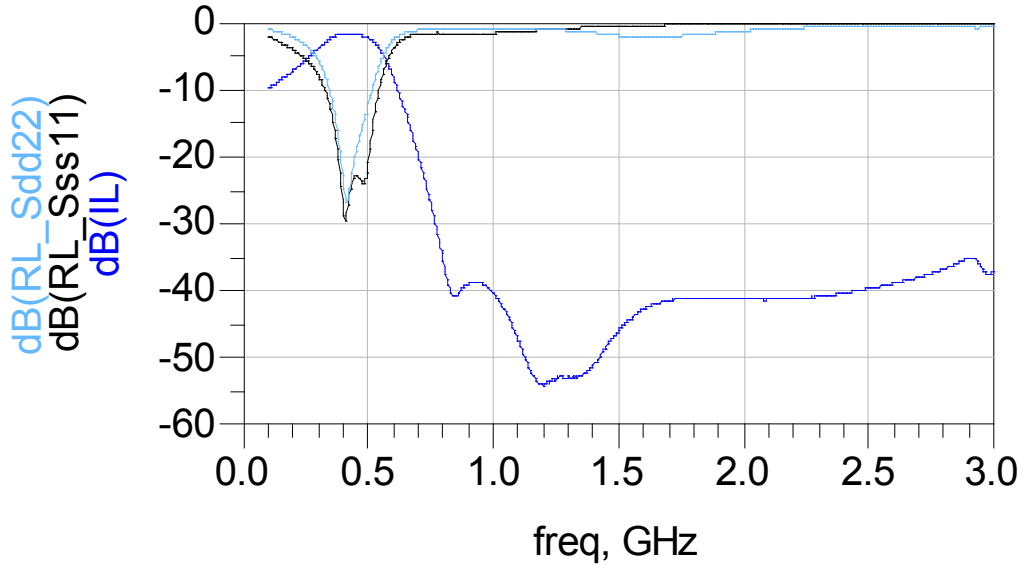
P/N 0433BM15A0001

Detail Specification: 10/27/2015

Page 1 of 3

Typical Electrical Performance (T=25°C)

Insertion Loss & Return Loss (Sds11, Sdd22, and Sss11)



Johanson Technology, Inc. reserves the right to make design changes without notice. Please confirm the specifications and delivery conditions when placing your order. All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver 2.2

2014 Johanson Technology, Inc. All Rights Reserved

"High Frequency Ceramic Solutions"

430/403 MHz Impedance Matched Balun/LPF Integrated Component for T.I. Chipsets: CC1100, CC1101, CC110L, CC1111, CC1130, CC1131, CC1150, CC1151, CC113L, CC115L, CC430 and RF430.

P/N 0433BM15A0001

Detail Specification: 10/27/2015

Page 4 of 4

RoHS Compliance

www.johansontechnology.com/technical-notes/rohs-compliance.html

Packaging information

www.johansontechnology.com/ipcpackaging.html

Soldering Information

www.johansontechnology.com/ipcsoldering-profile

Antenna layout and tuning techniques

www.johansontechnology.com/tuning

Antenna layout review, tuning, and characterization services

www.johansontechnology.com/ipcantennaservices

Pad metalization information

www.johansontechnology.com/silverleads

MSL Info

www.johansontechnology.com/technical-notes/msl-rating.html

Recommended Storage Condition and Max Shelf Life

www.johansontechnology.com/ipcstorage-shelflife

Application Notes, Layout Files, and more

www.johansontechnology.com/ti.html

Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver 2.2

2014 Johanson Technology, Inc. All Rights Reserved