

"High Frequency Ceramic Solutions"


AEC-Q200 Qualified Component

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

PN 0433BM15A0001E-AEC

Detail Specification: 8/15/2017

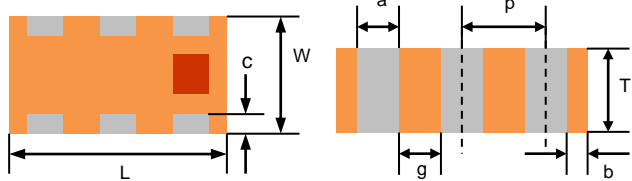
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General Specifications			
Part Number	0433BM15A0001E-AEC	This balun-filter works great with 430/433MHz ISM, 403.5MHz MICS bands and any frequencies in between	
Balanced Impedance	Impedance-Matched to T.I. CC110X, CC111X, CC113X and CC115X, CC110L, CC113L, CC115L, CC430 and RF430 Chipsets		
Unbalanced Impedance	50 Ω		
Recommended Storage Conditions for unused product on T&R	+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.	Operating Temperature	-40 to +105°C
Attenuation 1 (min.)	34 min. @ 2FO	Frequency 2 (MHz)	402 - 405
	35 min. @ 3FO	Insertion Loss 2	1.9 dB max.
	35 min. @ 4FO		25 min. @ 2FO
	35 min. @ 5FO		35 min. @ 3FO
	35 min. @ 4FO		
Return Loss 1	9.5min	Attenuation 2 (min.)	35 min. @ 5FO
Phase Difference 1	180° ± 10	Return Loss 2	9.5 dB max.
Amplitude Difference 1	1.5 dB max.	Phase Difference 2	180° ± 10
		Amplitude Difference 2	3.0 dB max.

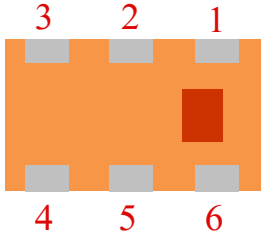
*For more info go to www.johansontechnology.com/silverleads-profile

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

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.

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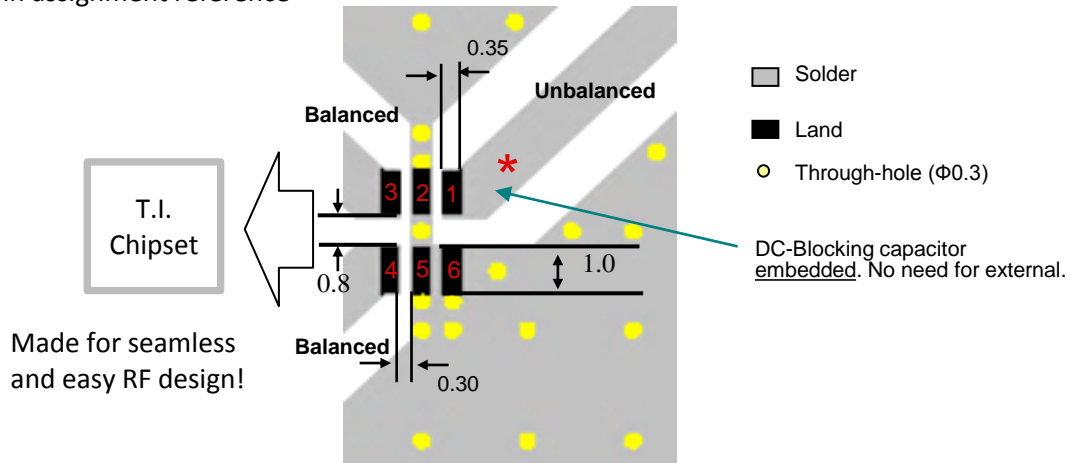
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Mounting Considerations

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/ask-a-question



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.



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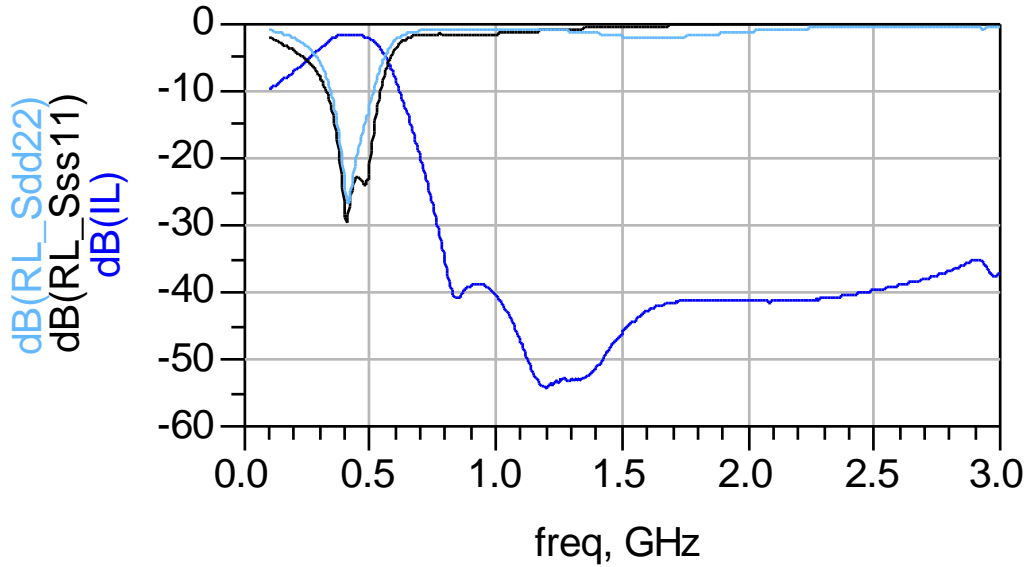
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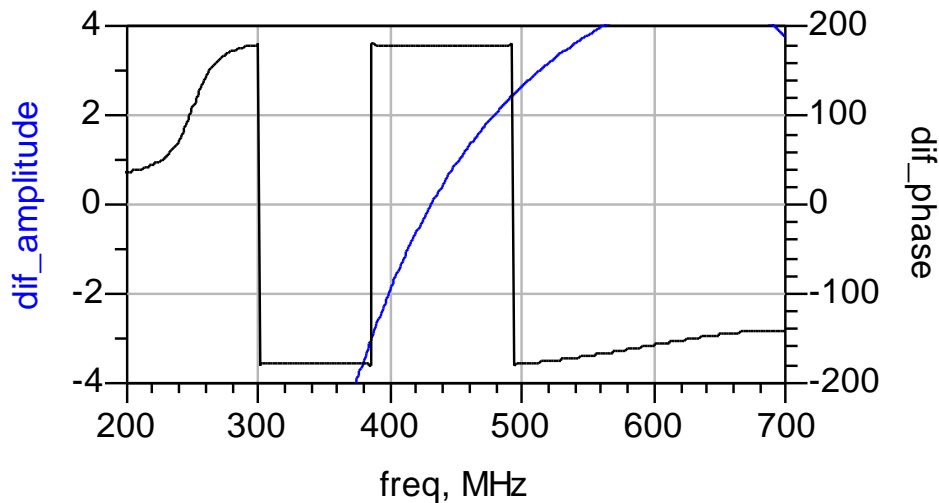
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Typical Electrical Performance (T=25°C)

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



Phase balance and amplitude difference



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RoHS compliance

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Antenna layout and tuning techniques

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MSL info

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Recommended storage condition and max shelf life

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Application notes, layout files, and more

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