

High Frequency Ceramic Solutions

AEC-Q200 Qualified Component

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

P/N 0868BM15C0001E-AEC

Detail Specification: 8/15/2017

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General Specifications

Part Number	0868BM15C0001E-AEC	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)
Attenuation	10 dB min. @ 699MHz	Reel Quantity	4,000
	30 dB min. @ 1736MHz	Operating Temperature	-40 to +105°C
	30 dB min. @ 2604MHz	Recommended Storage Conditions for unused product on T&R	+5 ~ +35 °C, Humidity 45~75%RH, 18 months. 1 week max after opened*
	35 dB min. @ 3472MHz		
30 dB min. @ 4340MHz			

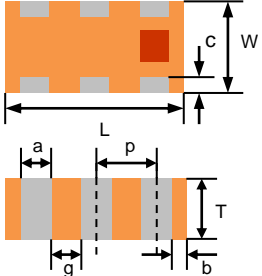
*For more info go to www.johansontechnology.com/silverleads-profile

Part Number Explanation

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

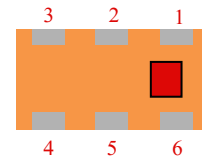
Mechanical Dimensions

	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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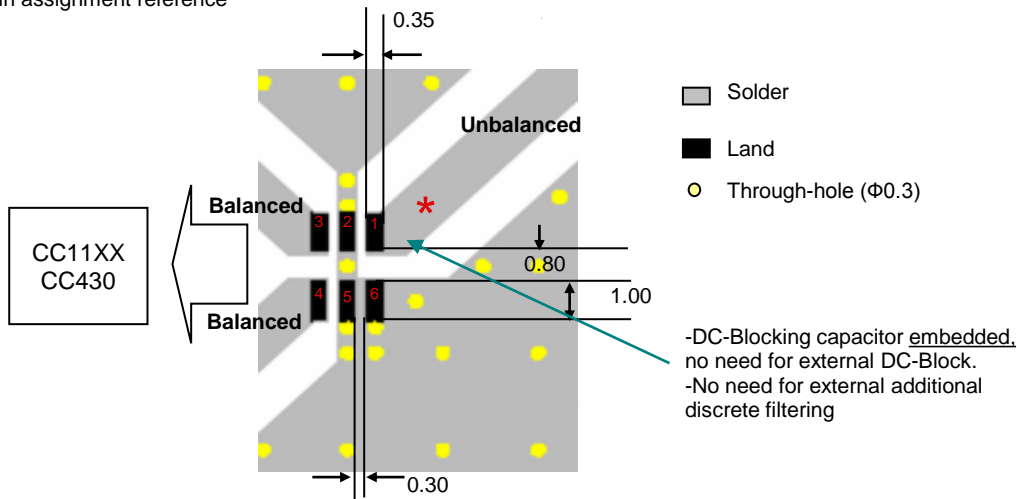
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Mounting Considerations

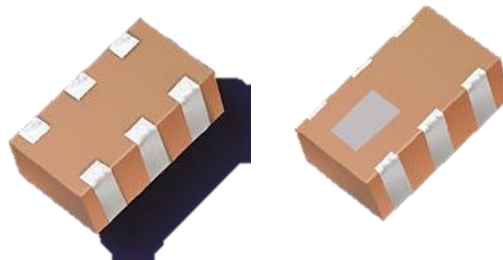
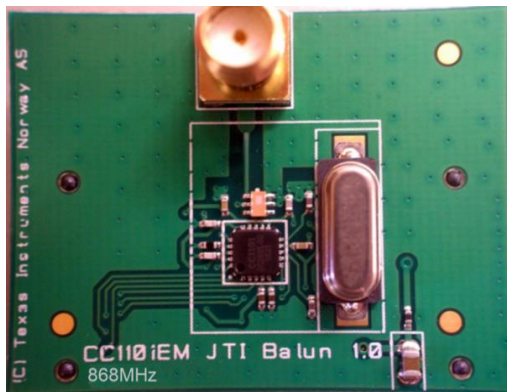
Mount these devices with brown mark facing up. Units: mm

* 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 or contact our Apps Engineering Team at: www.johansontechnology.com/ask-a-question



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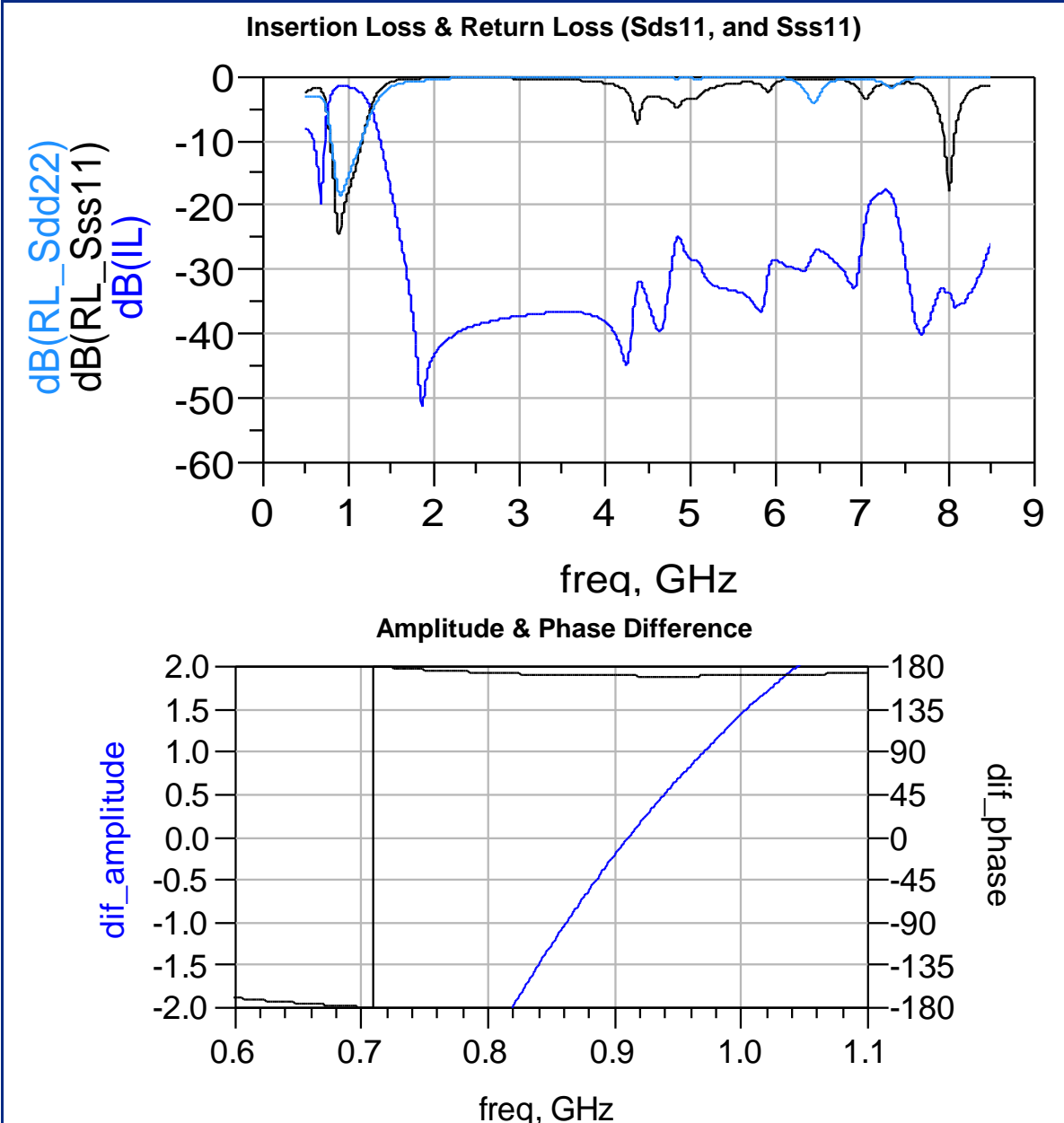
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Typical Electrical Performance (T=25°C)



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Recommended storage condition and max shelf life

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