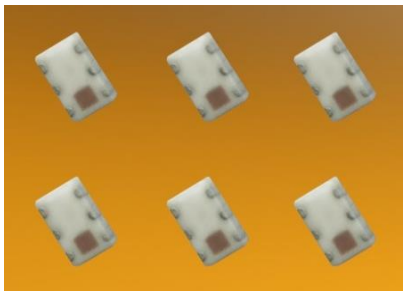
High Frequency Ceramic Solutions

Wideband Ceramic Balun, 1:2 Impedance Ratio, EIA 0805 **P/N 1720BL15A0100**

Detail Specification: 1/22/2016

General Specifications

Part Number	1720BL15A0100		
Frequency (MHz)	625 ~ 2815		
Unbalanced Impedance	50 Ω		
Balanced Impedance	100 Ω		
Insertion Loss	1.5 dB max.		
Return Loss	9.5 dB min.		
Phase Difference	180 ± 10 deg.		
Amplitude Difference	1.0 dB max.		
CMRR	20 dB min.	**Operating Temperature**	-40 to +85°C
Power Capacity	2W max. (CW)	**Storage Temperature**	-40 to +85°C
Reel Quantity	4,000 pcs	**Storage Period**	18 months max.



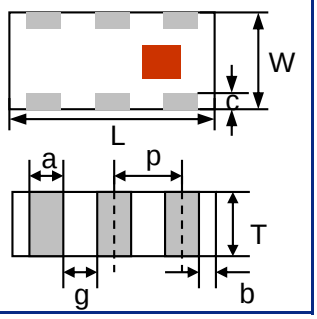
You can download measured s-parameters of this component at: http://www.johansontechnology.com/rfbaluns

Part Number Explanation

P/N Suffix	**Packing Style**	Bulk	Suffix = S	Eg. 1720BL15A0100S
		T & R	Suffix = E	Eg. 1720BL15A0100E
	Termination style	100% Tin	Suffix = None	Eg. 1720BL15A0100 (E or S)
	Evaluation Board	1720BL15A0100-EB1SMA (3 female SMA connectors)		

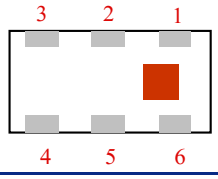
Mechanical Dimensions

	In	mm
L	0.079 ± 0.004	2.00 ± 0.10
W	0.049 ± 0.004	1.25 ± 0.10
T	0.037 ± 0.004	0.95 ± 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

1	Unbalanced Port (IN)	**4**	Balanced Port (OUT2)
2	GND or DC Feed + RF GND	**5**	GND
3	Balanced Port (OUT1)	**6**	NC



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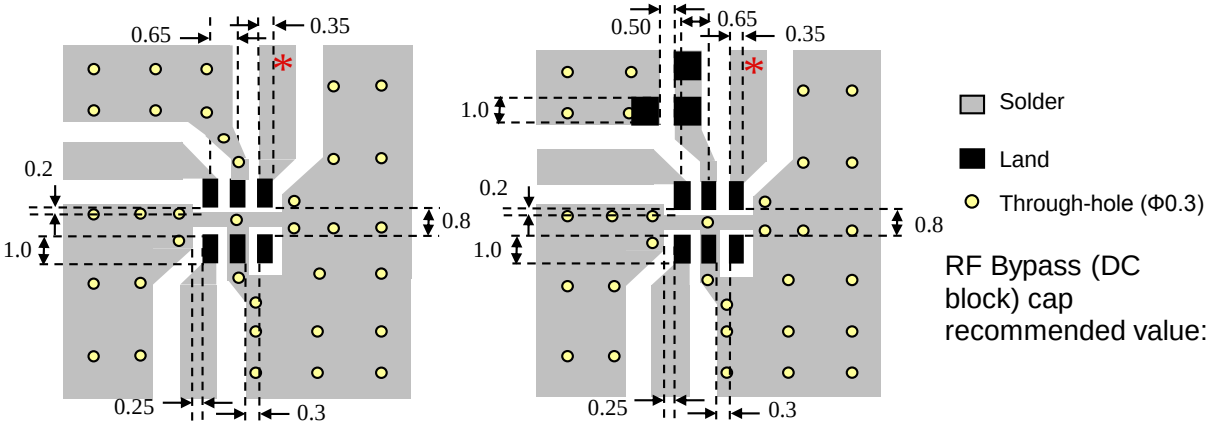
Mounting Considerations

Mount these devices with colored mark facing up.

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



RF Bypass (DC block) cap recommended value:

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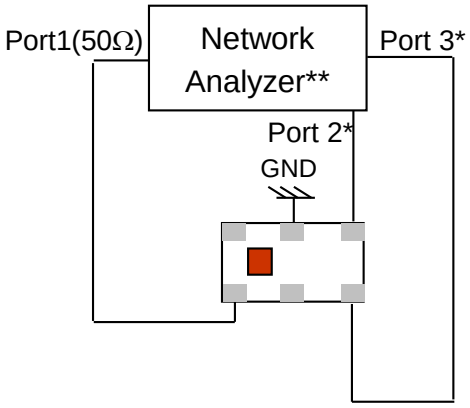
Measuring Diagram



Port 1:Unbalanced Port
Ports 2 and 3: Balanced Port
IL=Sds21
RL=Sss11
Amp_balance = dB(S(2,1)/S(3,1))
Phase_balance = Phase(S(2,1)/S(3,1))

*Impedance for ports 2 and 3 = Balanced Impedance/2
**E5071B from Agilent

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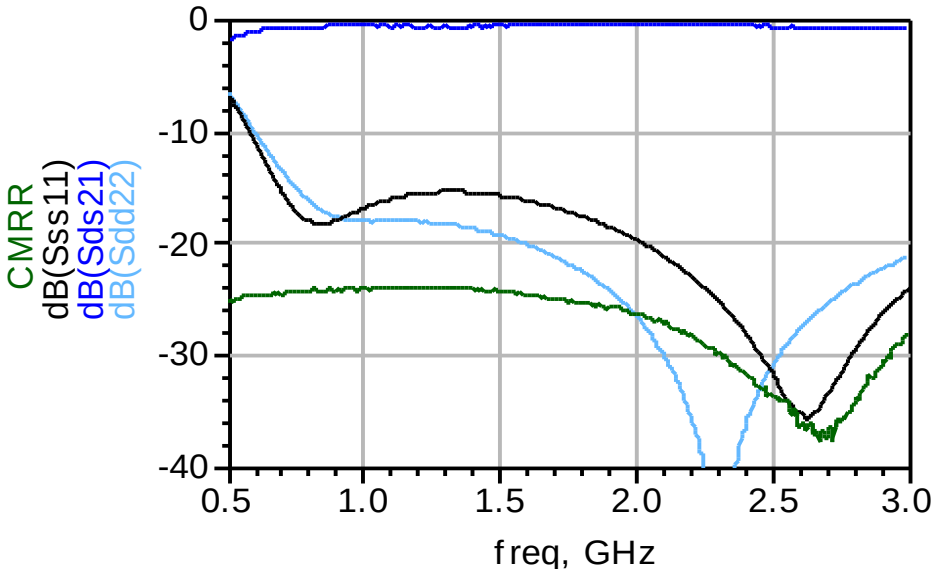
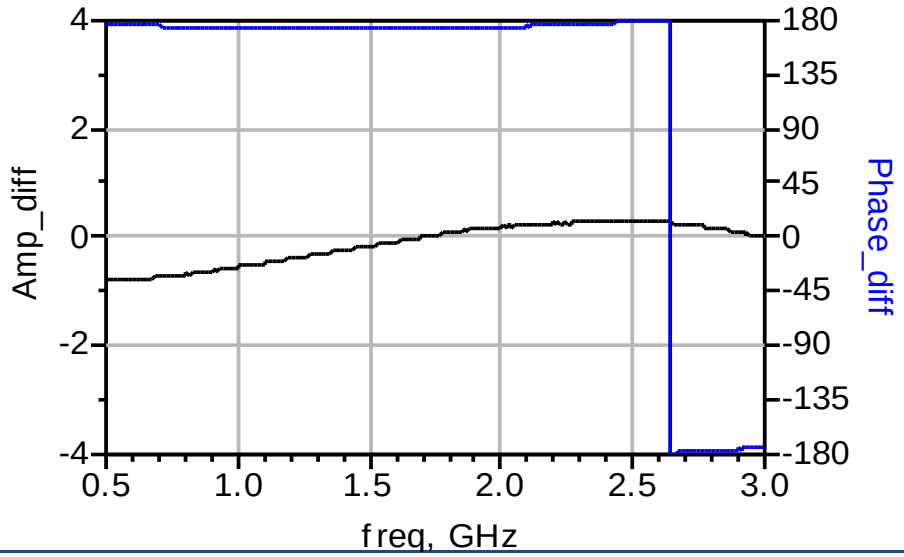
Typical Electrical Characteristics (T=25°C)

Insertion and Return Loss



Amplitude and Phase Balance



More Filter-Balun info at:
http://www.johansontechnology.com/baluns

Packaging information
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