

High Frequency Ceramic Solutions

1.8GHz 1:4 RF Balun with DC-Feed Option for For DCS/PCS/ UMTS/CDMA/LTE

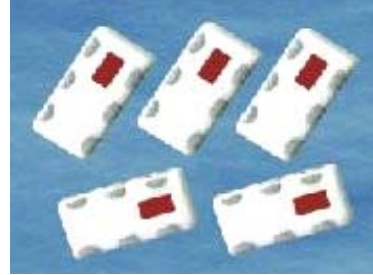
P/N 1800BL18B200

Detail Specification 5/22/2013

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General Specifications

Differential Balanced Imped.	200 Ω	Reel Quantity	3,000
Unbalanced Single Ended Imp.	50 Ω		
Operating Frequency 1 (MHz)	1700 - 1900	Recommended Storage Conditions	+5~+35°C, 18 mos. max. Humidity 45~75%RH
Insertion Loss 1 (-40 to +85°C)	0.8 dB max.		
Operating Frequency 2 (MHz)	1700 - 2200	Operating Temperature	-40 to +85°C
Insertion Loss 2 (-40 to +85°C)	0.85 dB max.		
Return Loss (1&2)	11 dB min.		
Phase Difference (deg.)	180 ± 10		
Amplitude Difference	2 dB max.		
Power Capacity	2W max. (CW)		
Case Size	EIA 1206		



Mechanical Dimensions

	In	mm
L	0.13 ± 0.01	3.2 ± 0.15
W	0.06 ± 0.01	1.6 ± 0.15
T	0.04 ± 0.00	1.0 ± 0.10
a	0.02 ± 0.01	0.6 ± 0.15
b	0.01 ± 0.01	0.4 ± 0.15
c	0.01 +0.004/-0.008	0.3 +0.1/-0.2
g	0.02 ± 0.01	0.4 ± 0.15
p	0.04 ± 0.00	1.0 ± 0.10

Terminal Configuration

No.	Function	No.	Function
1	GND or DC feed + RF GND	4	Balanced Port (OUT1)
2	Unbalanced Port (IN)	5	NC
3	GND or DC feed + RF GND	6	Balanced Port (OUT2)

Mounting Considerations

With DC Feed

Without DC Feed

Solder Resist
 Land
 Through-hole (φ 0.3)

* Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.
 ** By-pass capacitors should be connected when feeding DC power.

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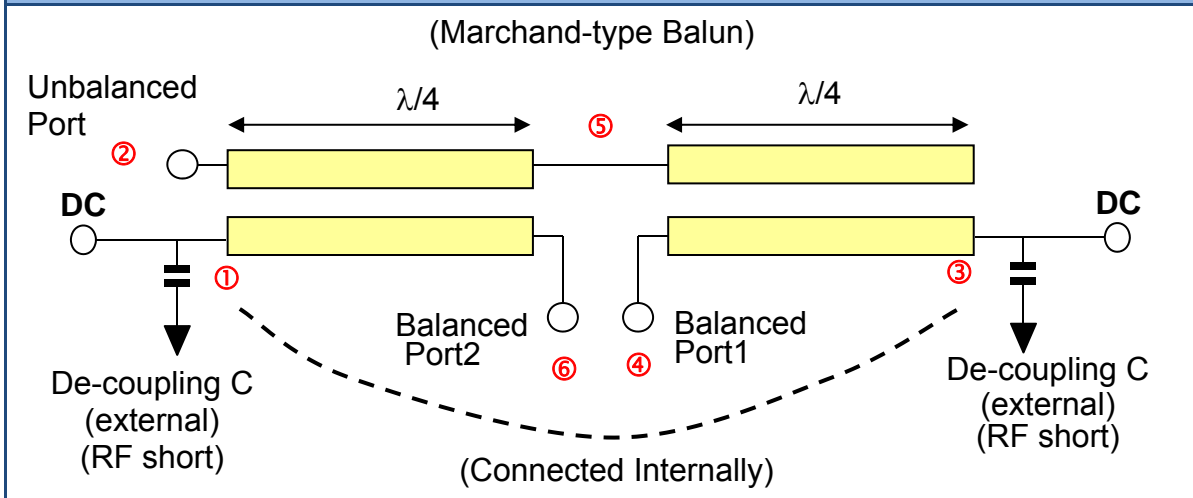
Detail Specificatic 5/22/2013

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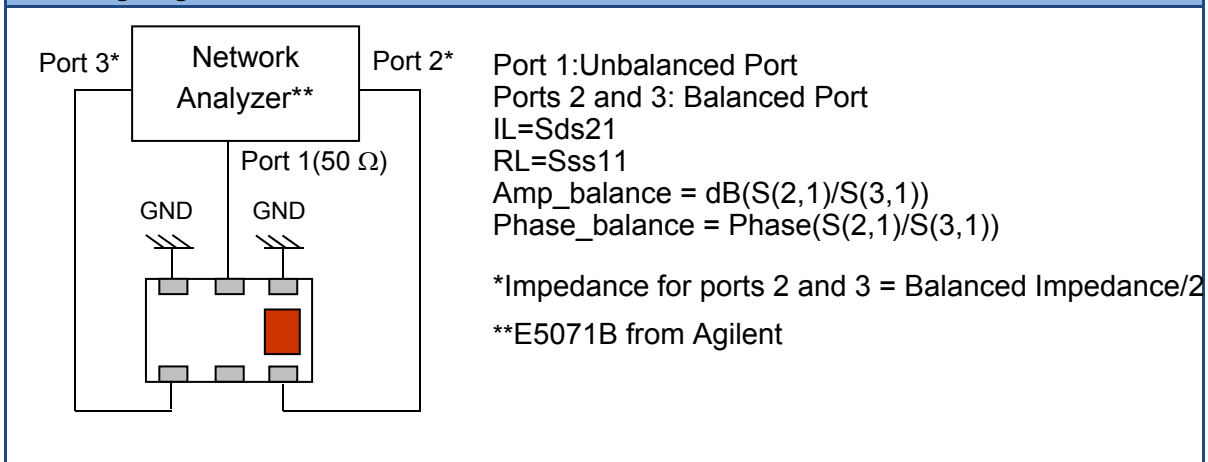
Part Number Explanation

P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 1800BL18B200S
		T & R	Suffix = E	eg. 1800BL18B200E
Evaluation Board				1800BL18B200-EB2SMA

Equivalent Circuit



Measuring Diagram



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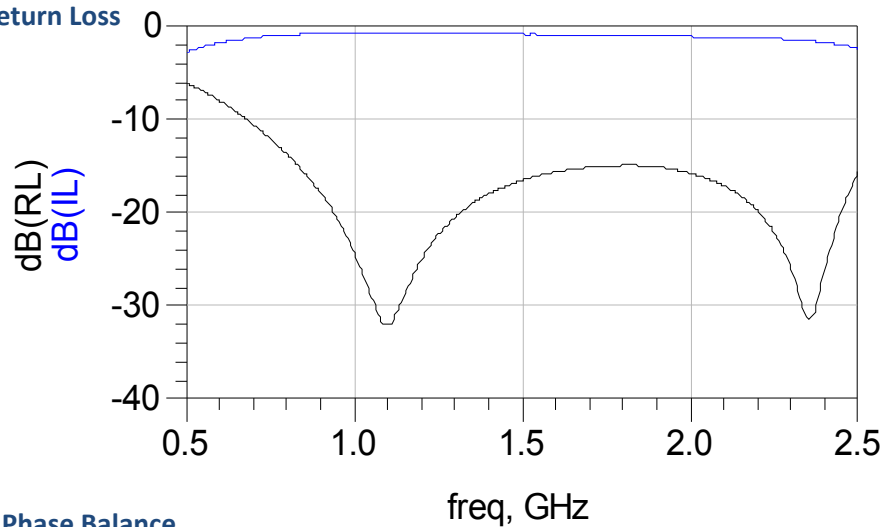
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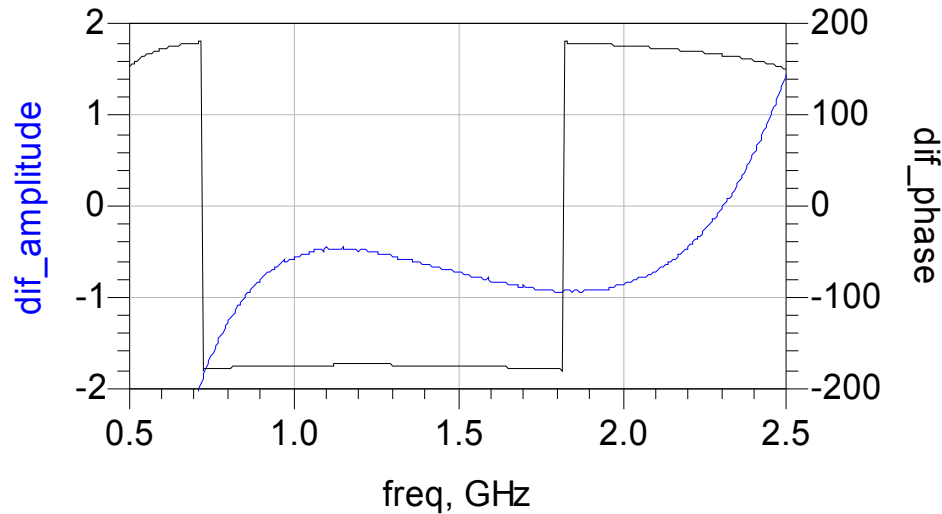
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Typical Electrical Performance (T=25°C)

Insertion and Return Loss



Amplitude and Phase Balance



Tape & Reel Specifications

<http://www.johansontechnology.com/ipcpackaging.html>

Soldering Profile

<http://johansontechnology.com/ipcsoldering-profile>

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

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