

# "High Frequency Ceramic Solutions"

**5.4GHz 50:200Ω Balun**

**P/N 5400BL14A0200**

Detail Specification: 12/14/10

Page 1 of 2

**General Specifications**

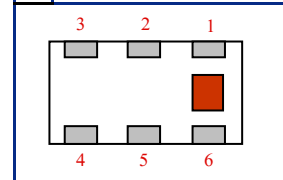
<b>Part Number</b>	5400BL14A0200
<b>Frequency (MHz)</b>	4900~5950
<b>Unbalanced Impedance</b>	50 Ω
<b>Balanced Impedance (diff.)</b>	200 Ω
<b>Insertion Loss</b>	1.2 dB max.
<b>Return Loss</b>	9.5 dB min.

<b>Phase Difference</b>	180° ± 10
<b>Amplitude Difference</b>	1.5 dB max.
<b>Operating Temperature</b>	-40 to +85°C
<b>Storage Temperature</b>	+5 ~ +35 °C, Humidity 45~75%RH, 18 mos. max
<b>Reel Quantity</b>	4,000
<b>Power Capacity</b>	0.5 watts max.

<b>P/N Suffix</b>	<b>Packaging Style</b>	Bulk	Suffix = S	Eg. 5400BL14A0200S
		T & R	Suffix = T	Eg. 5400BL14A0200T
	<b>Termination Style</b>	100% Tin	Suffix = None	Eg. 5400BL14A0200(T or S)
	<b>Evaluation Board</b>	5400BL140200-EB1SMA		

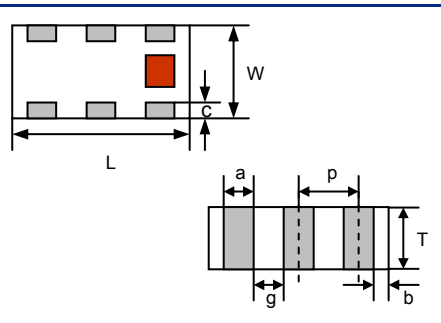
**Terminal Configuration**

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



**Mechanical Dimensions**

	In	mm
<b>L</b>	0.063 ± 0.004	1.60 ± 0.10
<b>W</b>	0.031 ± 0.004	0.80 ± 0.10
<b>T</b>	0.024 ± 0.004	0.60 ± 0.10
<b>a</b>	0.008 ± 0.004	0.20 ± 0.10
<b>b</b>	0.008 +.004/-.006	0.20 +0.1/-0.15
<b>c</b>	0.006 ± 0.004	0.15 ± 0.10
<b>g</b>	0.012 ± 0.004	0.30 ± 0.10
<b>p</b>	0.020 ± 0.002	0.50 ± 0.05



**Mounting Considerations**

Mount these devices with brown mark facing up.

\* Line width should be designed to provide proper impedance matching characteristics.

\*\* A 2.7-4.7pF by-pass capacitor should be connected to GND (acting as RF GND) when using the DC feed feature.

**Without DC Feed**

**With DC Feed\*\***

- Solder Resist
- Land
- Through-hole (Φ 0.3)
- RF by pass capacitor (DC Block)

Johanson p/n\*\*\*:  
 500R07S2R7CV4T  
 500R07S4R7CV4T  
 \*\*\*Either 2 values will work well as RF bypass (can use values in between)

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Preliminary

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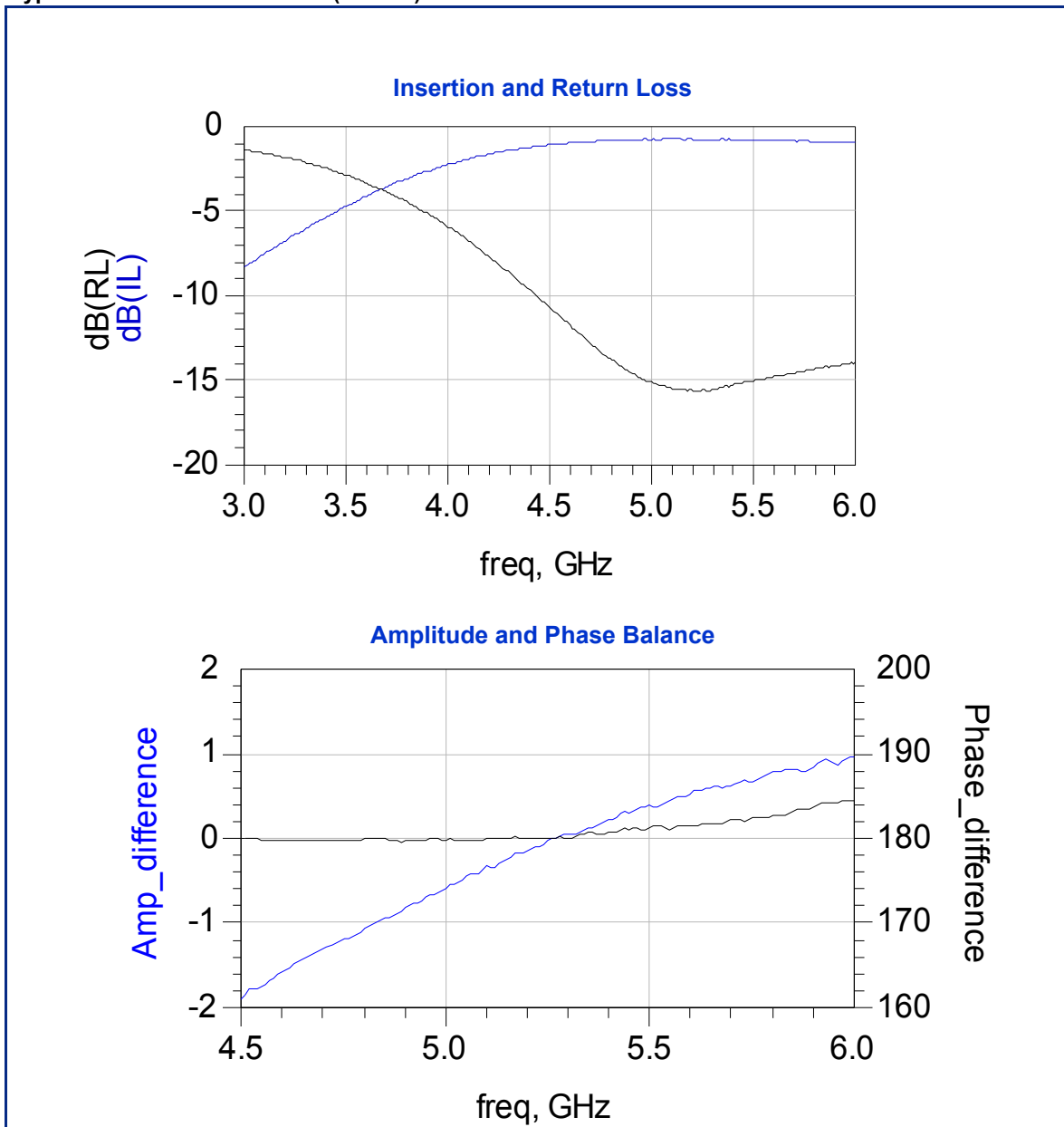
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Page 2 of 2

Typical Electrical Performance (T=25°C)



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