

# "High Frequency Ceramic Solutions"

## 2.45 GHz Balun

P/N 2450BL15B050

Detail Specification: 1/18/2019

Page 1 of 3

### General Specifications

Part Number	2450BL15B050	Phase Difference (degree)	180 ± 10
Frequency (MHz)	2400~2500	Amplitude Difference	2 dB max.
Unbalanced Impedence	50 Ω	Operating Temperature	-40 to +105°C
Differential Balanced Imp.	50 Ω	Storage Temperature	-40 to +105°C
Insertion Loss	1.0 dB max.	Reel Quantity	4000
Return Loss	9.5 dB min.	Power Capacity	3.0 watts max.

### Mechanical Dimensions

	In	mm
L	0.079 ± 0.004	2.00 ± 0.10
W	0.049 ± 0.004	1.25 ± 0.10
T	0.033 ± 0.004	0.85 ± 0.10
a	0.012 ± 0.004	0.30 ± 0.10
b	0.008 ± 0.004	0.20 ± 0.10
c	0.012 +.004/-.006	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 or DC feed
3	Balanced Port
4	Balanced Port
5	GND
6	NC

### Packaging Considerations

P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 2450BL15B050S
		T & R	Suffix = E	eg. 2450BL15B050E
Evaluation Board		2450BL15B050-EB1SMA		

### Mounting Considerations

Mount these devices with brown mark facing up.

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

- Solder Resist
- Land
- Through-hole (φ0.3)

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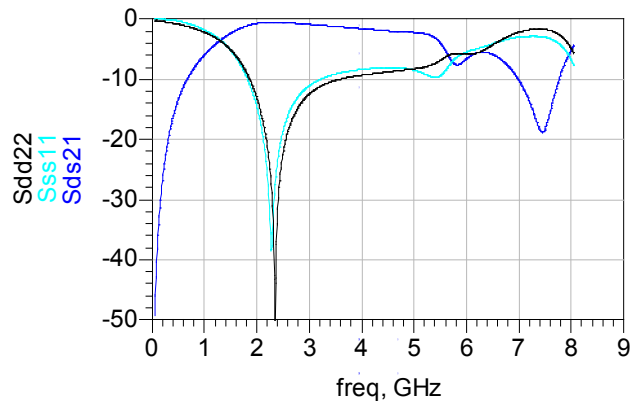
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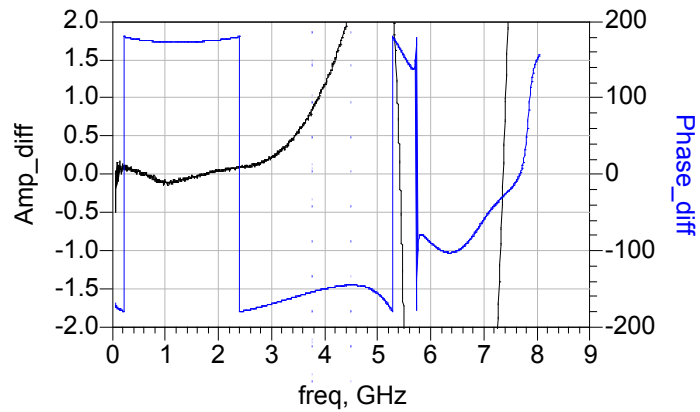
Page 2 of 3

## Typical Electrical Performance (T=25°C)

### Insertion and Return Loss



### Amplitude and Phase Balance



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Page 3 of 3

### More Balun info at:

[www.johansontechnology.com/baluns](http://www.johansontechnology.com/baluns)

### RoHS Compliance

[www.johansontechnology.com/rohs-compliance](http://www.johansontechnology.com/rohs-compliance)

### Packaging information

[www.johansontechnology.com/tape-reel-packaging](http://www.johansontechnology.com/tape-reel-packaging)

### Soldering Information

[www.johansontechnology.com/ipcsoldering-profile](http://www.johansontechnology.com/ipcsoldering-profile)

### Layout Files, s-parameters and any other technical questions

[www.johansontechnology.com/ask-a-question](http://www.johansontechnology.com/ask-a-question)

### MSL Info

[www.johansontechnology.com/msl-rating](http://www.johansontechnology.com/msl-rating)

### Recommended Storage Condition and Max Shelf Life

[www.johansontechnology.com/recommended-storage-conditions](http://www.johansontechnology.com/recommended-storage-conditions)

### Antenna layout and tuning techniques

[www.johansontechnology.com/tuning](http://www.johansontechnology.com/tuning)

### Antenna layout review, tuning, and characterization services

[www.johansontechnology.com/ipc-antenna-services](http://www.johansontechnology.com/ipc-antenna-services)

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