

# High Frequency Ceramic Solutions

## 2.45 GHz Balun / Filter Combination

P/N 2450FB15K0004

Detail Specification: 07/17/09

Page 1 of 2

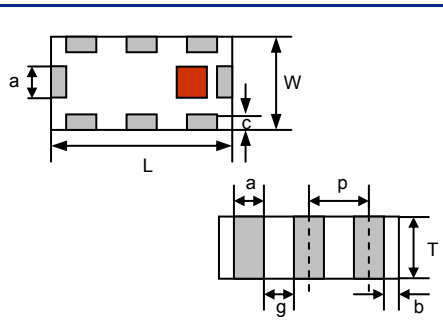
### General Specifications

Part Number	2450FB15K0004
Frequency (MHz)	2400~2500
Unbalanced Impedance	50 $\Omega$
Differential Balanced Imp.	Conjugate match to CSR BC03, BC04
Insertion Loss	3.2 dB max.
Return Loss	9.5 dB min.
Phase Difference	180° $\pm$ 10
Amplitude Difference	1.5 dB max.

Attenuation (dB)	48 min.@ 880~960MHz
	30 min.@1710~1880 MHz
	30 min.@1880~1990MHz
	20 min.@4800~5000MHz
	20 min.@7200~7500MHz
Operating Temperature	-40 to +85°C
Storage Temperature	+5 to +35°C, Hum. 45 to 75%RH, 12 mos. Max
Power Capacity	1 Watt max.
Reel Quantity	4000

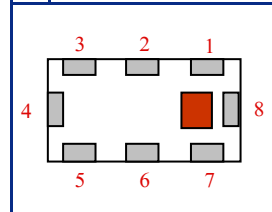
### Mechanical Dimensions

	In	mm
L	0.079 $\pm$ 0.008	2.00 $\pm$ 0.20
W	0.049 $\pm$ 0.008	1.25 $\pm$ 0.20
T	0.028 $\pm$ 0.004	0.70 $\pm$ 0.10
a	0.012 $\pm$ 0.004	0.30 $\pm$ 0.10
b	0.008 $\pm$ 0.004	0.20 $\pm$ 0.10
c	0.012 +.004/- .008	0.30 +0.1/-0.2
g	0.014 $\pm$ 0.004	0.35 $\pm$ 0.10
p	0.026 $\pm$ 0.002	0.65 $\pm$ 0.05



### Terminal Configuration

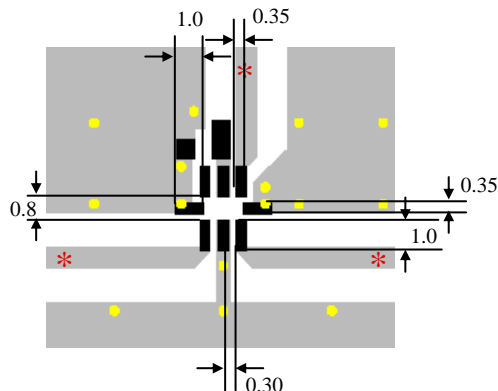
No.	Function
1	Unbalanced Port
2	NC or DC Feed
3	NC
4	GND
5	Balanced Port
6	GND
7	Balanced Port
8	GND



### Mounting Considerations

\* Line width should be designed to match 50  $\Omega$  characteristic impedance, depending on PCB material and thickness.

\*\* By-pass capacitor should be connected when feeding DC power.



- Solder Resist
- Land
- Through-hole ( $\phi$ 0.3)

Units: mm

Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



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

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2009 Johanson Technology, Inc. All Rights Reserved

# High Frequency Ceramic Solutions

2.45 GHz Balun / Filter Combination

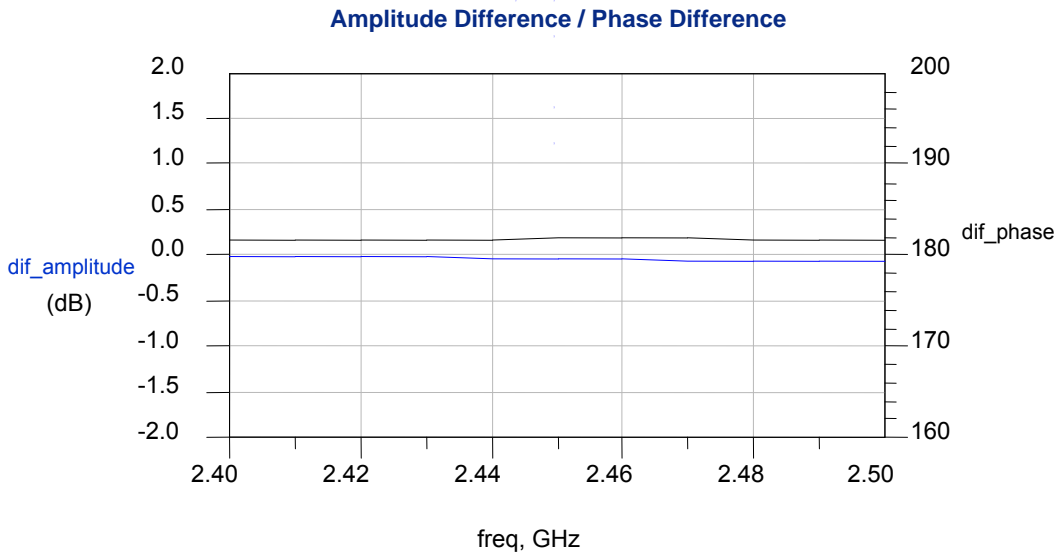
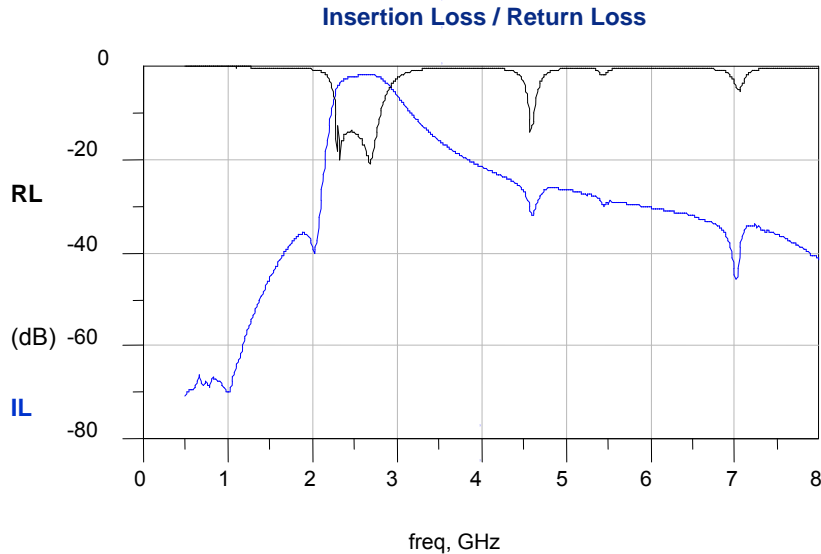
P/N 2450FB15K0004

Detail Specification: 07/17/09

Page 2 of 2

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

\* Note: The balanced ports (pins 5 & 7) are terminated with a balanced impedance of  $28 - j 64$ .



Johanson Technology, Inc. reserves the right to make design changes without notice.  
All sales are subject to Johanson Technology, Inc. terms and conditions.



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

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2009 Johanson Technology, Inc. All Rights Reserved