

# "High Frequency Ceramic Solutions"

## 2.45 GHz Balun / Filter Combination

P/N 2450FB39B100

Detail Specification: 03/30/06

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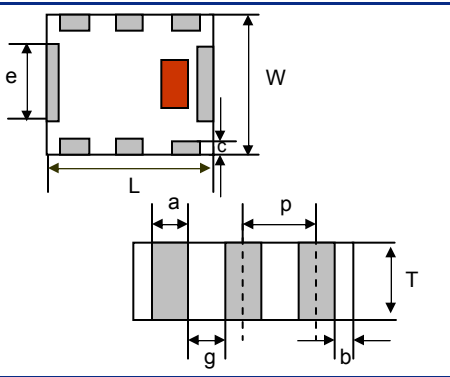
### General Specifications

Part Number	2450FB39B100
Frequency (MHz)	2400~2500
Unbalanced Impedance	50 $\Omega$
Differential Balanced Imp.	100 $\Omega$
Insertion Loss	2.0 dB max.
Return Loss	9.5 dB min.
Phase Difference	180° $\pm$ 10
Amplitude Difference	1.0 dB max.

Attenuation (dB)	35 min. @ 880~960MHz
	30 min. @ 1710~1910 MHz
	30 min. @ 4800~5000MHz
	25 min. @ 7200~7500MHz
Operating and Storage Temp.	-40 to +85°C
Reel Quantity	4,000
Power Capacity	1.0 watt max.

### Mechanical Dimensions

	In	mm
L	0.098 $\pm$ 0.008	2.50 $\pm$ 0.20
W	0.079 $\pm$ 0.008	2.00 $\pm$ 0.20
T	0.047 $\pm$ 0.004	1.20 $\pm$ 0.10
a	0.016 $\pm$ 0.004	0.40 $\pm$ 0.10
b	0.014 $\pm$ 0.004	0.35 $\pm$ 0.10
c	0.012 $\pm$ 0.004	0.30 $\pm$ 0.10
e	0.039 $\pm$ 0.004	1.00 $\pm$ 0.10
g	0.012 $\pm$ 0.004	0.30 $\pm$ 0.10
p	0.028 $\pm$ 0.004	0.70 $\pm$ 0.10



### Terminal Configuration

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

The diagram shows a top view of the component with 8 terminals labeled 1 through 8. Terminals 1, 2, 3, 4, 5, and 6 are arranged in a row at the top. Terminals 7 and 8 are on the left and right sides respectively.

P/N	Packaging Style	Bulk	Suffix = S	Eg. 2450FB39B100S
		T & R	Suffix = E	Eg. 2450FB39B100E
Suffix	Termination Style	100% Tin	Suffix = None	Eg. 2450FB39B100(E or S)
		Tin / Lead	Suffix = /Pb	Eg. 2450FB39B100(E or S)/Pb

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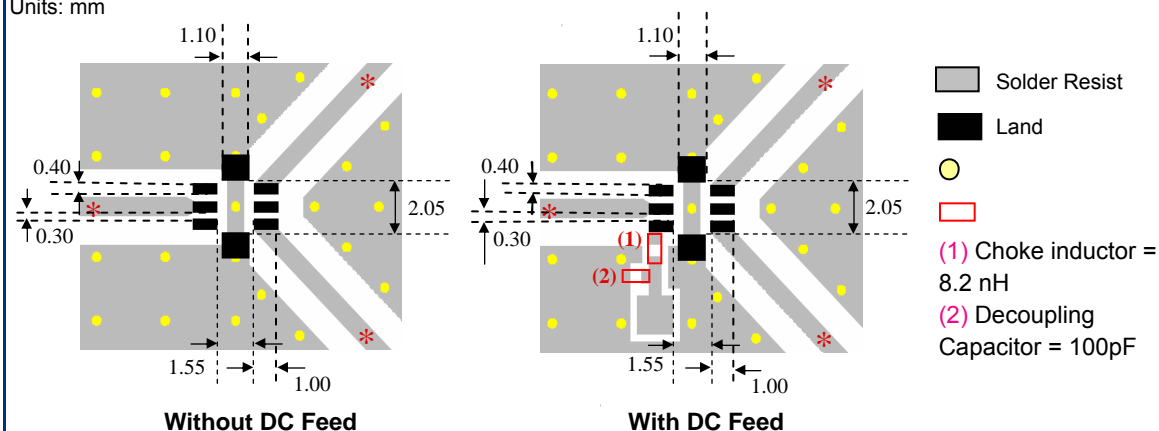
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### Mounting Considerations

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

Units: mm



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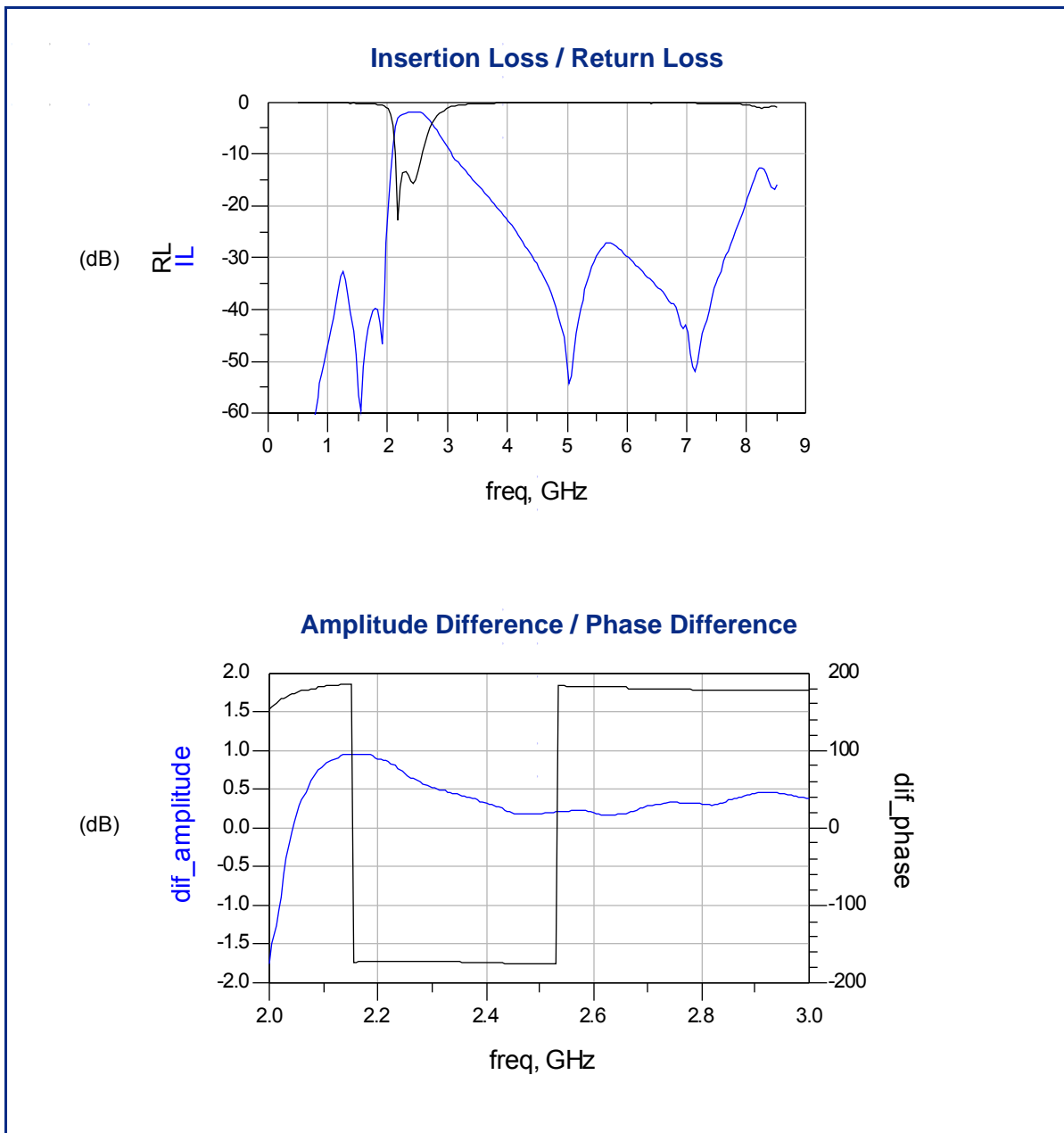
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### Typical Electrical Performance (T=25°C)



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