

# "High Frequency Ceramic Solutions"

## 2.45 GHz Balun / Filter Combination

P/N 2450FB39K001

Detail Specification: 12/19/05

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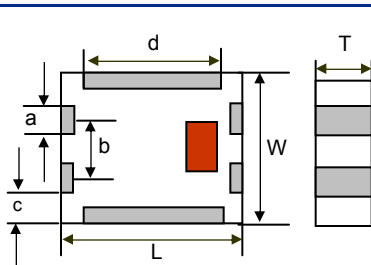
### General Specifications

<b>Part Number</b>	2450FB39K001
<b>Frequency (MHz)</b>	2400~2500
<b>Unbalanced Impedance</b>	50 Ω
<b>Differential Balanced Imp.</b>	22+j100 Conjugate match to CSR chipset
<b>Insertion Loss</b>	3.0 dB max.
<b>Return Loss</b>	9.5 dB min.
<b>Phase Difference</b>	180° ± 8
<b>Amplitude Difference</b>	1.0 dB max.

<b>Attenuation (dB)</b>	45 min.@ 880~960MHz
	38 min.@1710~1880 MHz
	35 min.@1880~1990MHz
	20 min.@2110~2170MHz
	25 min.@4800~5000MHz
<b>Operating and Storage Temp.</b>	-40 to +85°C
<b>Reel Quantity</b>	3,000
<b>Power Capacity</b>	1.0 watt max.

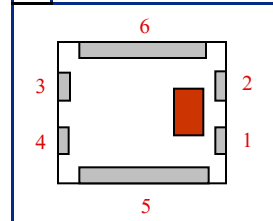
### Mechanical Dimensions

	In	mm
<b>L</b>	0.098 ± 0.008	2.50 ± 0.20
<b>W</b>	0.079 ± 0.008	2.00 ± 0.20
<b>T</b>	0.043 ± 0.004	1.10 ± 0.10
<b>a</b>	0.016 ± 0.008	0.40 ± 0.20
<b>b</b>	0.031 ± 0.008	0.80 ± 0.20
<b>c</b>	0.012 +.004/-0.008	0.30 +0.1/-0.2
<b>d</b>	0.075 ± 0.008	1.90 ± 0.20



### Terminal Configuration

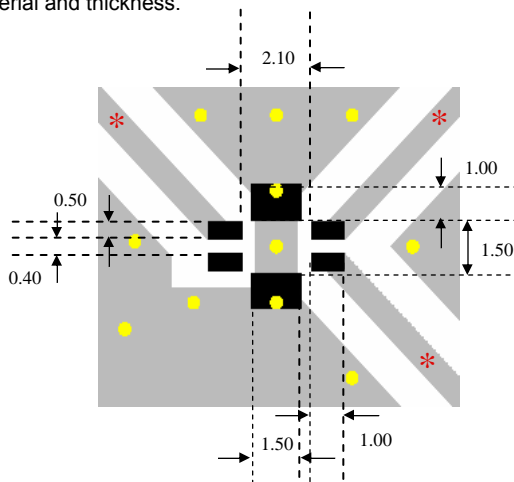
No.	Function
1	Unbalanced Port
2	DC
3	Balanced Port
4	Balanced Port
5	GND
6	GND



### Mounting Considerations

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

Units: mm



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

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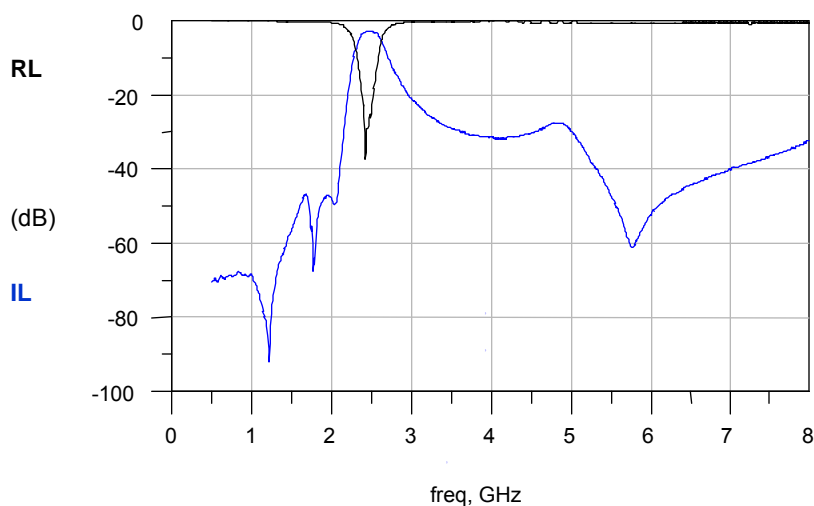
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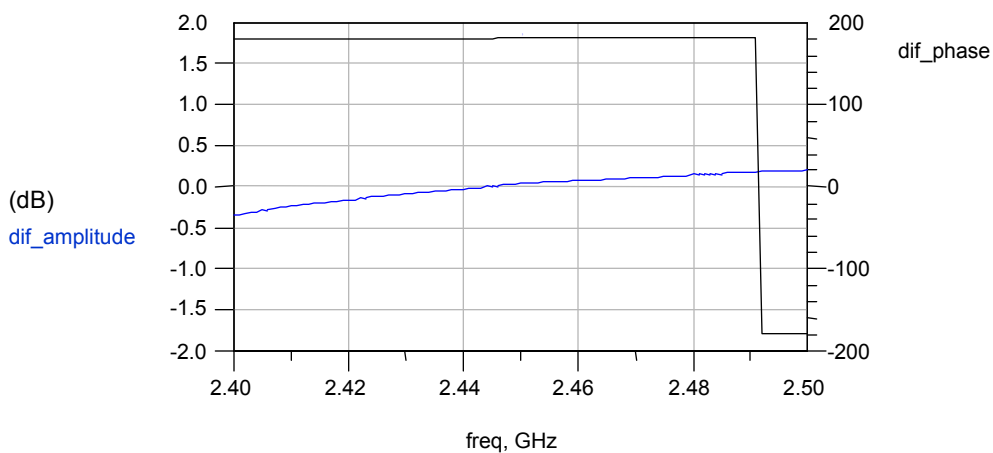
### Typical Electrical Performance (T=25°C)

\* Note: The balanced ports (pins 3 & 4) are terminated with a balanced impedance of 22-j100.

#### Insertion Loss / Return Loss



#### Amplitude Difference / Phase Difference



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931 Via Alondra • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

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