

# High Frequency Ceramic Solutions

**2.45 GHz, Matched Balun-Filter for CSR BC Series Chipset**

**P/N 2450FB15K0005**

Detail Specification: 07/15/09

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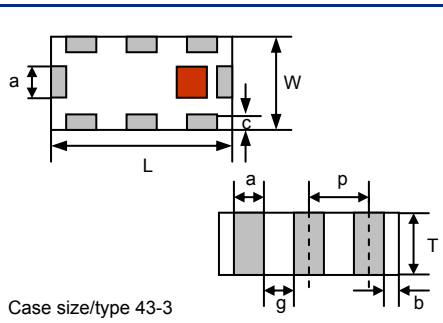
## General Specifications

<b>Part Number</b>	2450FB15K0005
<b>Frequency (MHz)</b>	2400~2500
<b>Unbalanced Impedance</b>	50 $\Omega$
<b>Differential Balanced Imp.</b>	Conjugate match to BC series of CSR
<b>Insertion Loss</b>	3.5 dB max.
<b>Return Loss</b>	9.5 dB min.
<b>Phase Difference</b>	180° $\pm$ 10
<b>Amplitude Difference</b>	1.5 dB

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

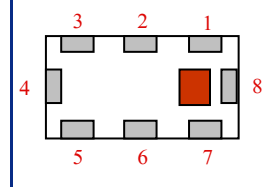
## Mechanical Dimensions

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



## Terminal Configuration

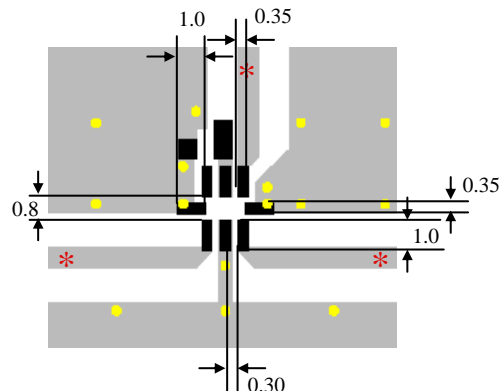
No.	Function
1	Unbalanced Port
2	NC or DC Feed
3	NC
4	GND
5	Balanced Port
6	GND
7	Balanced Port
8	GND



## 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

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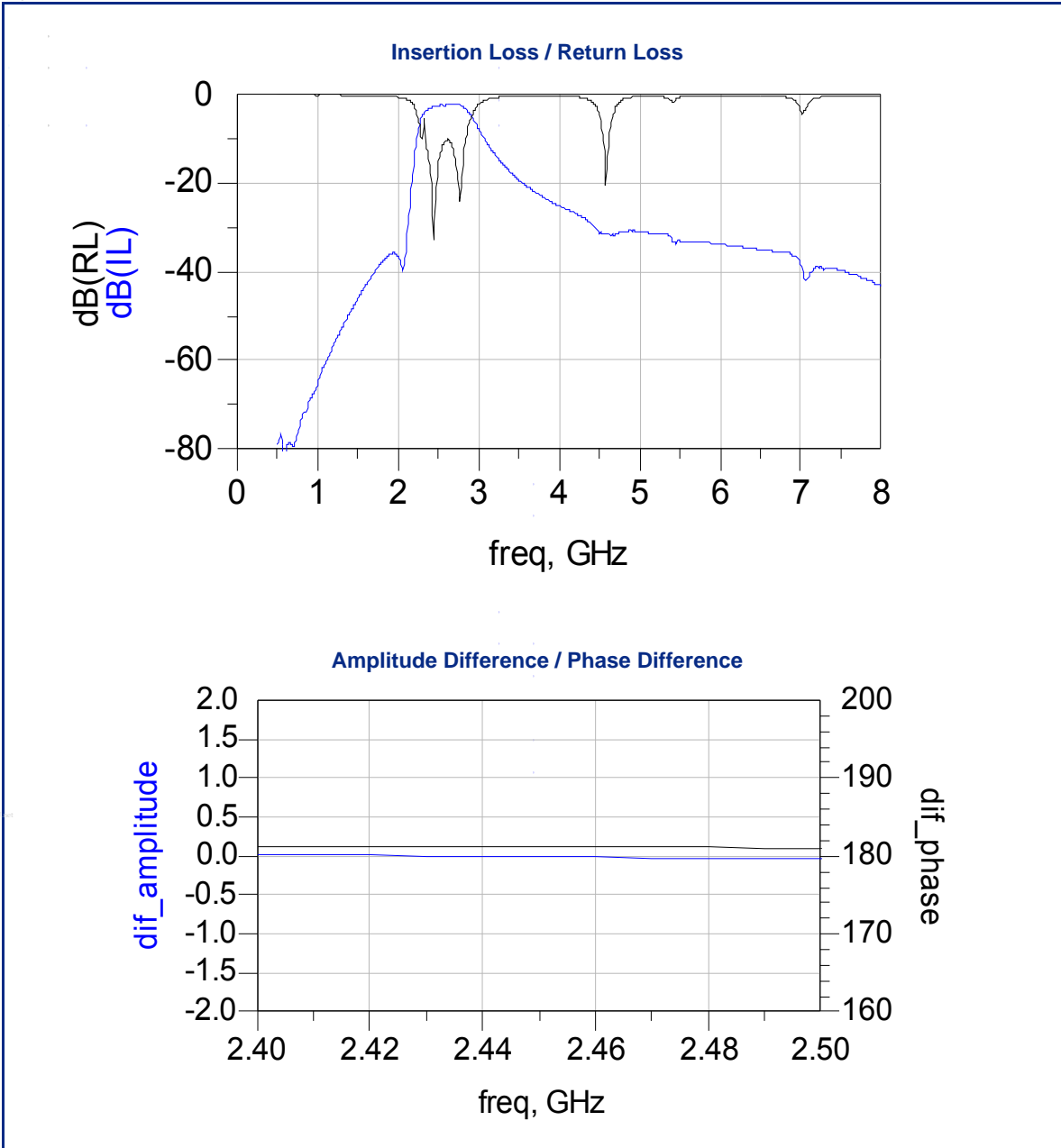
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Typical Electrical Performance (T=25°C)



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