

"High Frequency Ceramic Solutions"

2450 MHz Matched Balun-Filter for CSR BC 04/05 Series Chipset P/N 2450FB15K0008

Detail Specification: 1/14/11

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General Specifications

Part Number	2450FB15K0008
Frequency Range	2400~2500 MHz
Unbalanced Impedance	50 Ω
Balanced Impedance	Conjugate match to CSR BC 04/05 series chipsets
Insertion Loss	3.5 dB max
Return Loss	9.5 dB min.
Phase Difference	180°±10
Amplitude Difference	1.5 dB

Attenuation (dB)	45 min.@ 880~960MHz
	30 min.@1710~1880 MHz
	25 min.@1880~1990 MHz
	40 min.@4800~5000MHz
	30 min.@7200~7500MHz
Input Power	1W max.
Impedance	50 Ω
Reel Quantity	4000
Operating Temperature	-40 to +85°C
Storage Temperature	+5 to +35°C, Humidity: 45-75%RH, 18 mos. Max

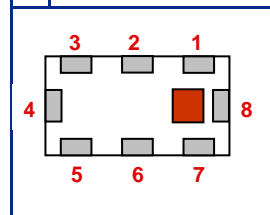
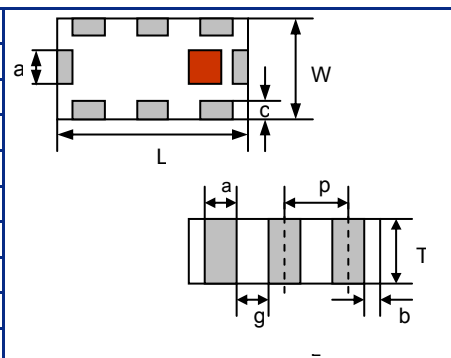
P/N Suffix	Packaging Style	Bulk	Suffix = S	Eg. 2450FB15K0008S
		T & R	Suffix = E	Eg. 2450FB15K0008E
	Termination Style	100% Tin	Suffix = None	Eg. 2450FB15K0008(E or S)
	Evaluation Board	2450FB15K0008-EB1SMA		

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

Mechanical Dimensions

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



** A 10pF by-pass capacitor to GND (or RF GND) should be connected when using DC-Feed feature

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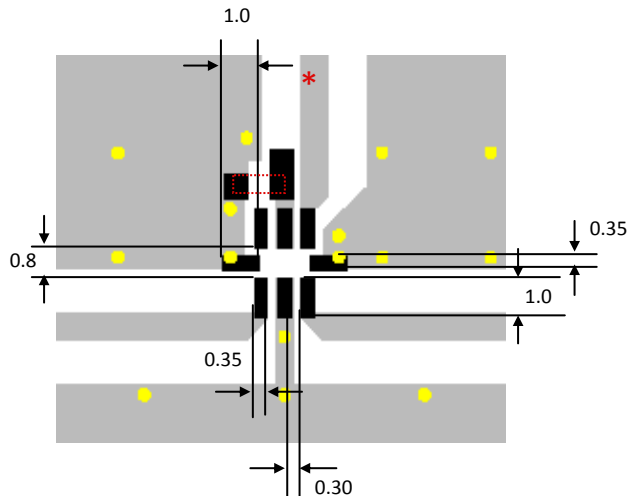
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Mounting Considerations



■ Solder Resist

■ Land

● Through-hole (Ø 0.3)

Internal DC-Connections

- a) Pin1*** – Pin4 – Pin6 – Pin8
- b) Pin2 – Pin5 – Pin7

*** (un-balanced port DC short to GND)

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

** A 10pF by-pass capacitor to GND (or RF GND) should be connected when using DC-Feed feature

Note: The distance between 2450FB15K0008 and IC should be about 1.5~2mm. The differential feed lines' impedance between 2450FB15K0008 and IC is not critical as long as the length (distance) is short (1.5~2mm). The only geometrical concern on the feed lines would be to keep the same linewidth and length for them.



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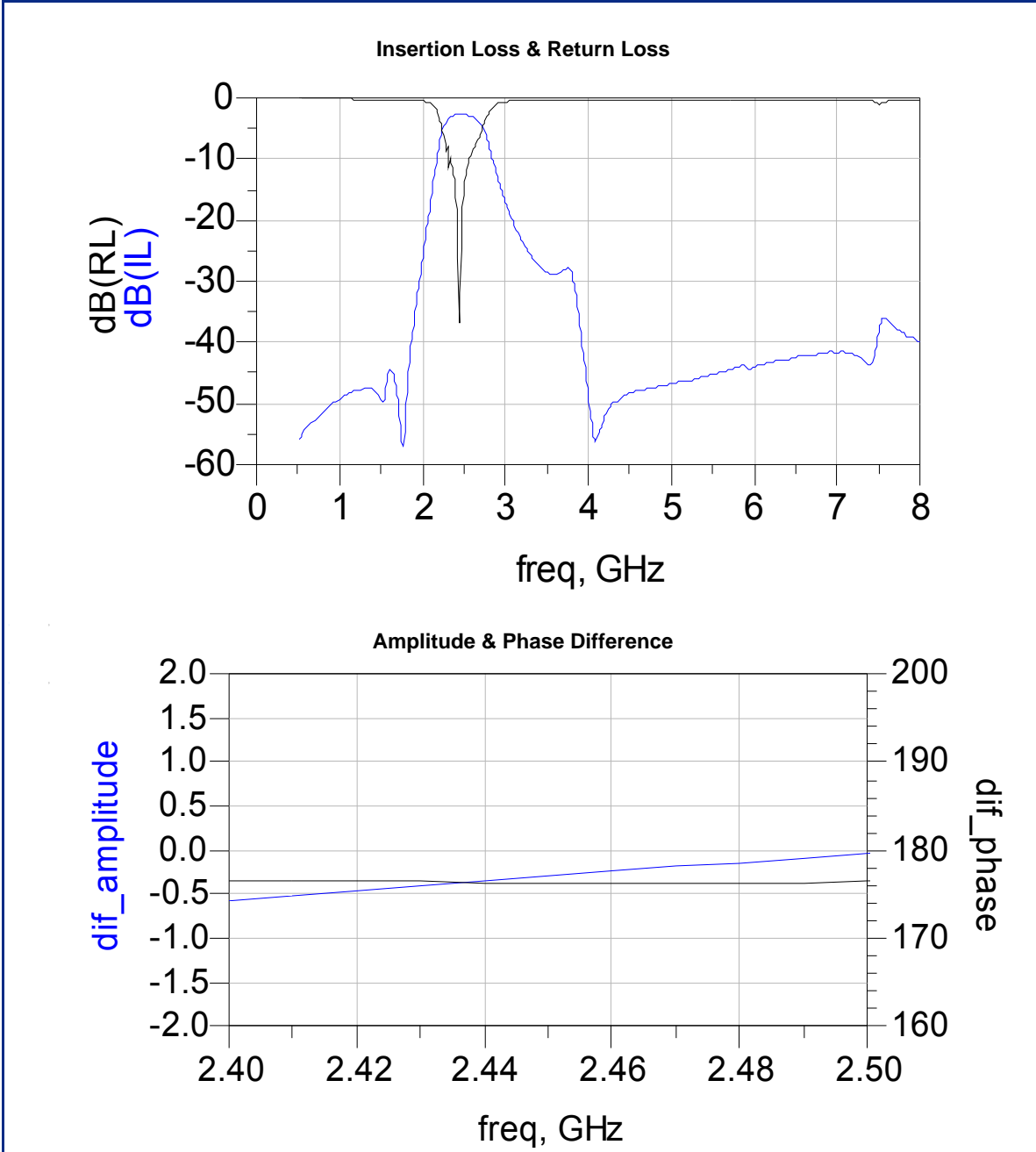
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Typical Electrical Characteristics (T=25°C)



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