

# "High Frequency Ceramic Solutions"

2450 MHz Matched Balun-Filter for CSR BC 04/05/06 Series Chipset

P/N 2450FB15K0008

Detail Specification: 3/6/2012

Page 1 of 3

## General Specifications

Part Number	2450FB15K0008
Frequency Range	2400~2500 MHz
Unbalanced Impedance	50 Ω
Balanced Impedance	Conjugate match to CSR BC 04/05/06 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

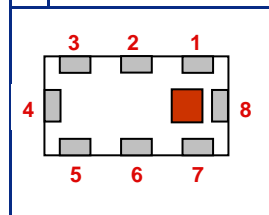
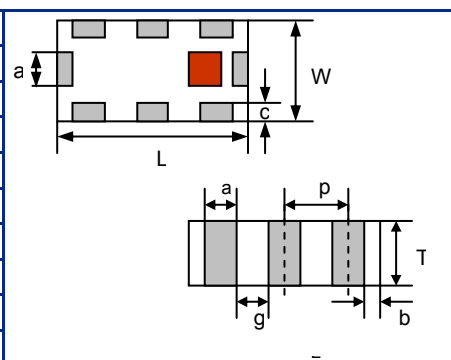
P/N Suffix	Packaging Style	Bulk	Suffix = S	Eg. 2450FB15K0008S
		T & R	Suffix = E	Eg. 2450FB15K0008E
	Termination Style	100% Tin	Suffix = None	Eg. 2450FB15K0008(E or S)
	Evaluation Board	2450FB15K0008-EB1SMA		

## 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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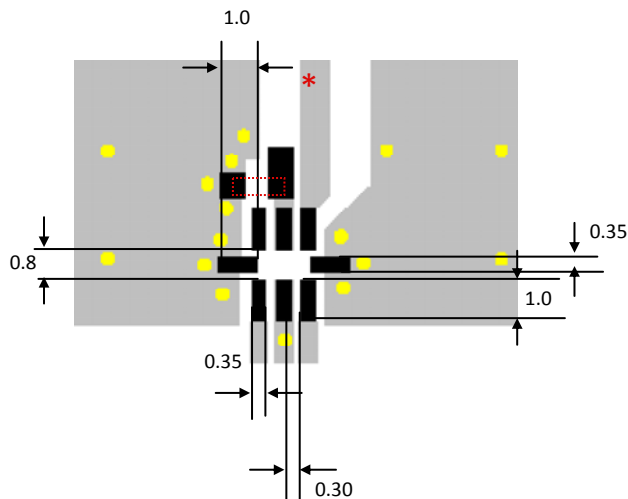
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P/N 2450FB15K0008

Detail Specification:

Page 2 of 3

## Mounting Considerations



■ Solder Resist

■ Land

● Through-hole (Ø 0.3)

### Internal DC-Connections

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

\*\*\* (un-balanced antenna port  
(Pin1 has DC short to GND))

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

\*\* A 10pF by-pass capacitor to GND (or RF GND) should be connected when using DC-the 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 too 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.

This component is compatible with both CSP and BGA packaging styles.

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Detail Specification:

Page 3 of 3

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

