

"High Frequency Ceramic Solutions"

2.45 GHz Filter Balun, conjugate match to BC03 & BC04 BGA/CSP and MTK 6611/6612 chipsets

P/N 2450FB15M0001

Detail Specification: 05/05/2012

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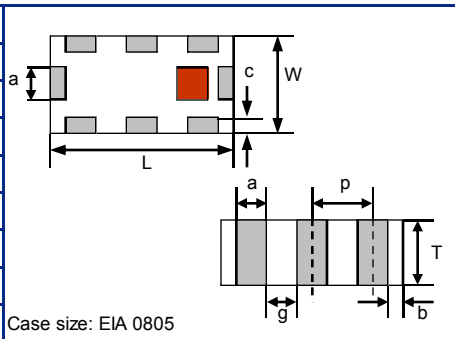
General Specifications

Part Number	2450FB15M0001
Frequency (MHz)	2400~2500
Unbalanced Impedence	50 Ω
Balanced Impedence	Conjugate match to BC03, BC04 BGA/CSP and MTK 6611/6612 chipsets
Insertion Loss	3.0 dB max.
Return Loss	9.5 dB min.
Phase Difference	180° $\pm$ 15
Amplitude Difference	2.0 dB max.

Attenuation (dB)	40 min.@ 880~960MHz
	35 min.@1710~1880 MHz
	25 min.@1880~1990MHz
	35 min.@4800~5000MHz
	25 min.@7200~7500MHz
Operating Temperature	-40 to +85 °C
Recommended Storage Conditions	+5 to +35°C, Humidity: 45-75%RH, 18 mos. Max
Input Power	1 Watt max.
Reel Quantity	4,000

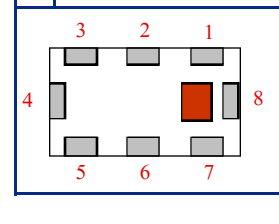
Mechanical Dimensions

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



Terminal Configuration

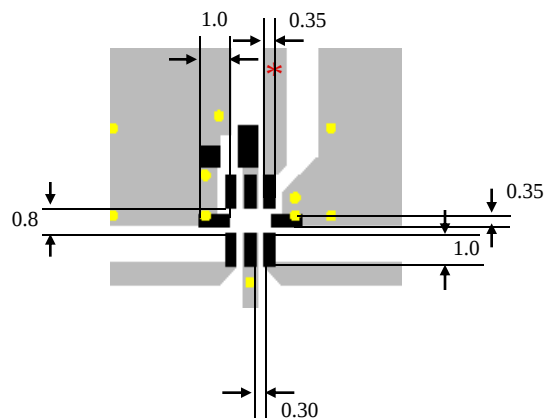
No.	Function
1	Unbalanced Port
2	NC or DC Feed
3	NC
4	GND
5	Balanced Port
6	GND
7	Balanced Port
8	GND



Mounting Considerations

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

** By-pass capacitor should be connected when feeding DC power



- Solder Resist
- Land
- Through-hole (ϕ 0.3)

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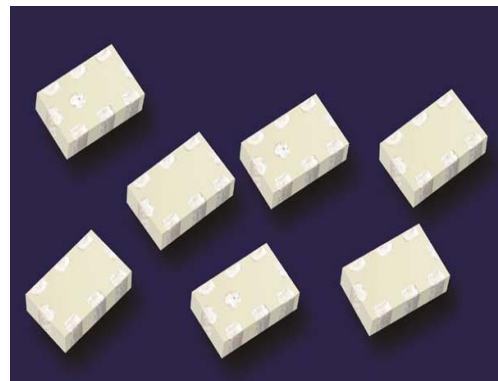
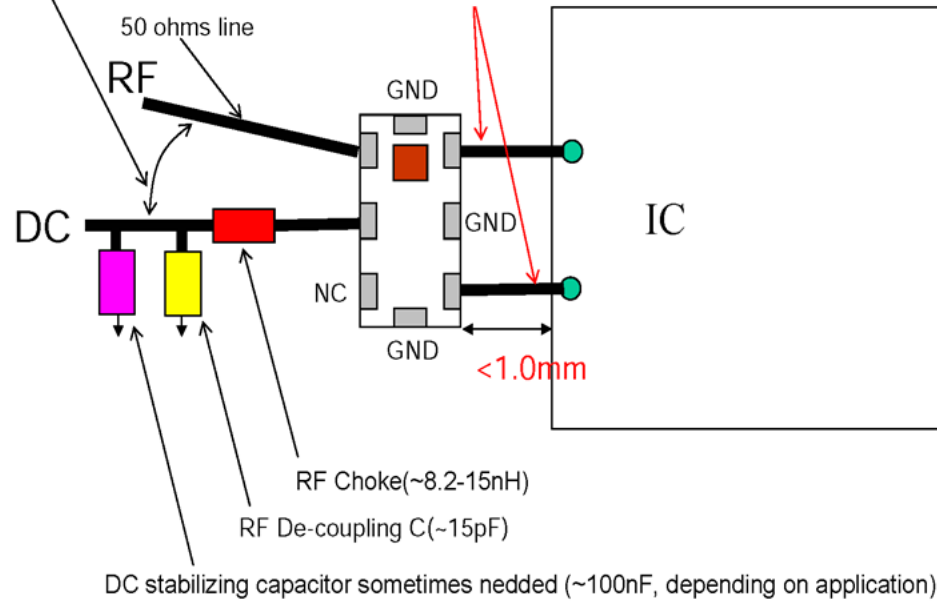
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Technical Note for DC Feed

To avoid RF signal coupled to VCO via DC line, it is better to have larger spacing between RF and DC lines

1. Keep the same width and length for these two lines, and the length should be designed to be less than 1.0mm.
2. Line impedances are about 40~60 ohms.



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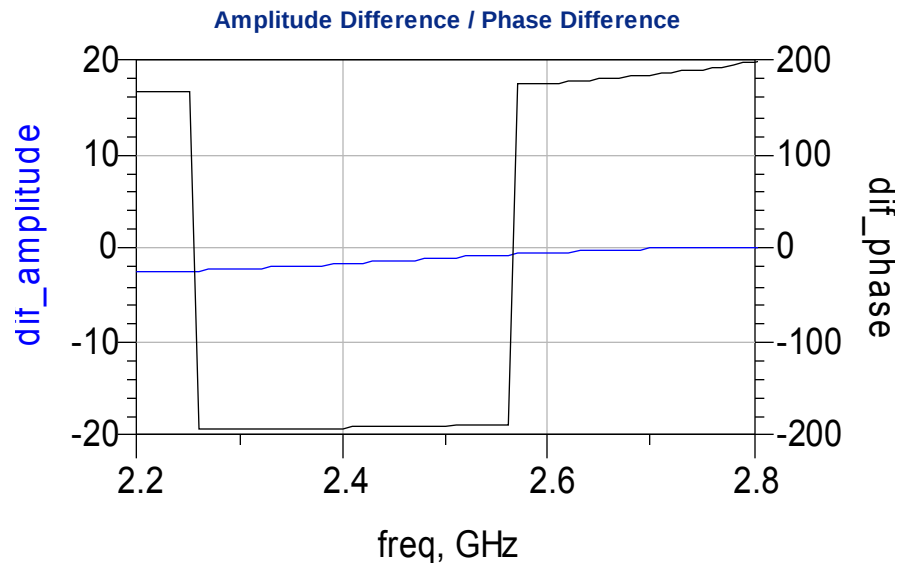
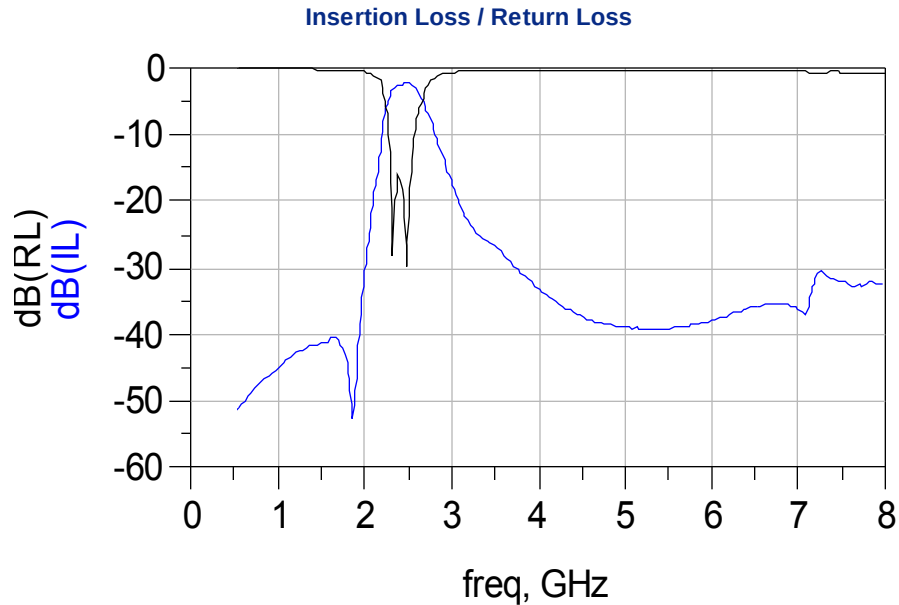
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Typical Electrical Performance (T=25°C)



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