

"High Frequency Ceramic Solutions"

2.45 GHz Impedance matched Balun-Filter for Texas Instruments' CC2500, CC2510, and CC2511 Chipsets

P/N 2450BM15B0003

Detail Specification: 9/12/2012

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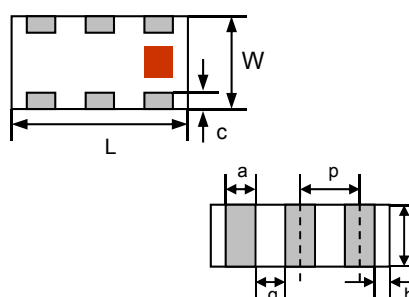
General Specifications

Part Number	2450BM15B0003	Differential Mode Attenuation (dB)	20 min.@ 4800~5000MHz 20 min.@ 7200~7500MHz
Frequency (MHz)	2400~2500	Common Mode Attenuation (dB)	17 min.@ 4800~5000MHz
Unbalanced Impedance	50 Ω	Operating Temperature	-40°C to +125°C
Differential Balanced Impedance	Conjugate match to TI CC2500, CC2510, CC2511 chipsets	Recommended Storage Conditions	+5 to +35°C, Humidity: 45-75%RH, 12 mos. Max
Insertion Loss	2.2 dB max. 1.7dB typ	Input Power	2 Watts max.
Return Loss	10 dB min.	Reel Quantity	4,000
Phase Difference	180° $\pm$ 12		
Amplitude Difference	2.0 dB max.		

* 18 months in vacuum sealed bag and 1 week after opened. For more info go to www.johansontechnology.com/silverleads

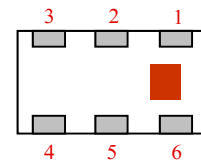
Mechanical Dimensions

	In	mm
L	0.079 $\pm$ 0.004	2.00 $\pm$ 0.10
W	0.049 $\pm$ 0.004	1.25 $\pm$ 0.10
T	0.031 $\pm$ 0.004	0.80 $\pm$ 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	0.30 $\pm$ 0.10
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	DC Feed + RF GND
3	Balanced Port
4	Balanced Port
5	GND
6	GND



Mounting Considerations

0402 22pF RF GND cap Johanson p/n: 500R07S220JV4

Johanson Chip Inductor p/n L-07C10NJV6 (EIA 0402)

CC2500

Units: mm

0.8

0.18

0.35

0.30

Legend:

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

* Line width should be designed to match 50 W characteristic impedance, depending on PCB material and thickness.
- Go to page 2 for a more detailed layout

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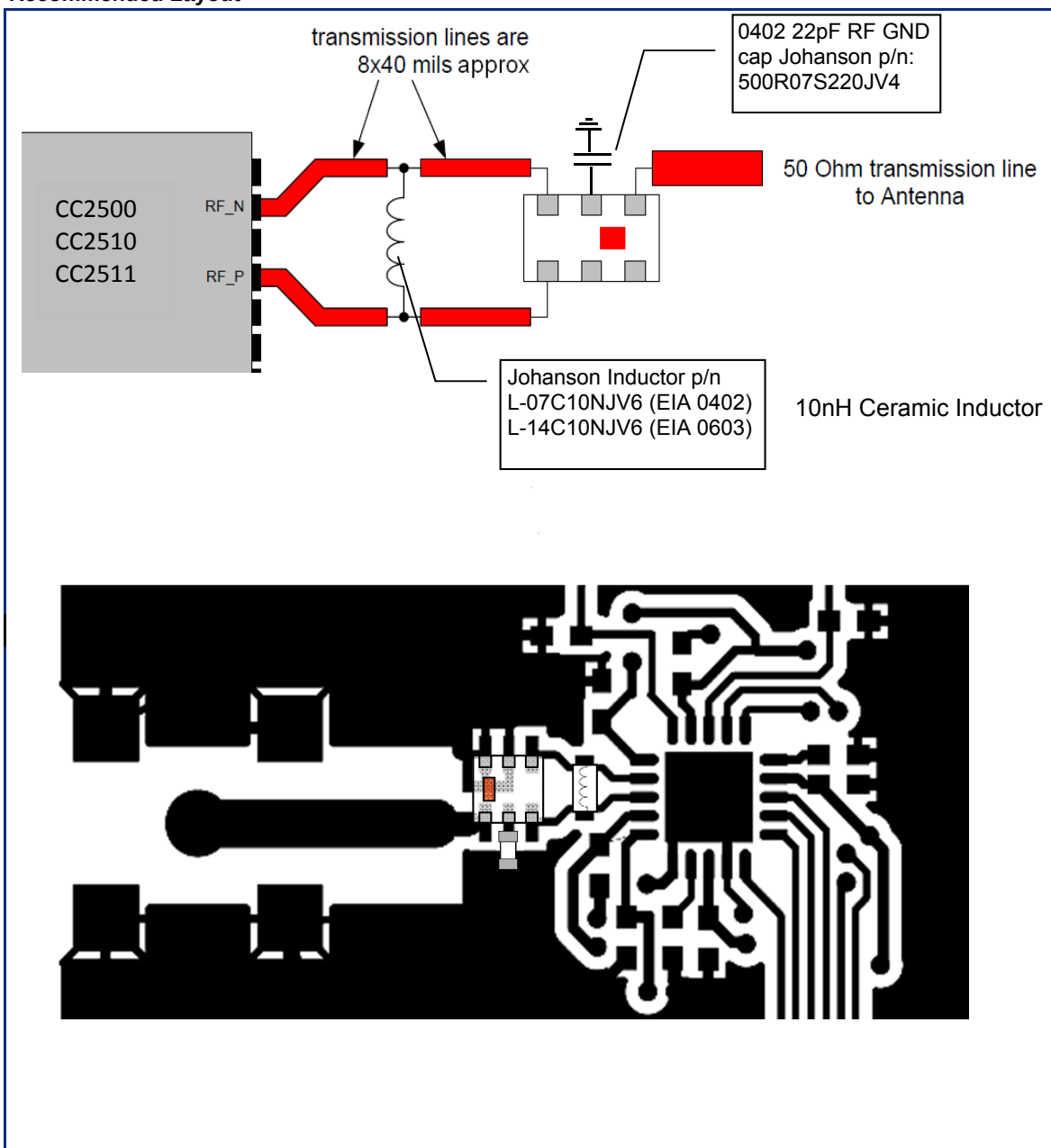
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Recommended Layout



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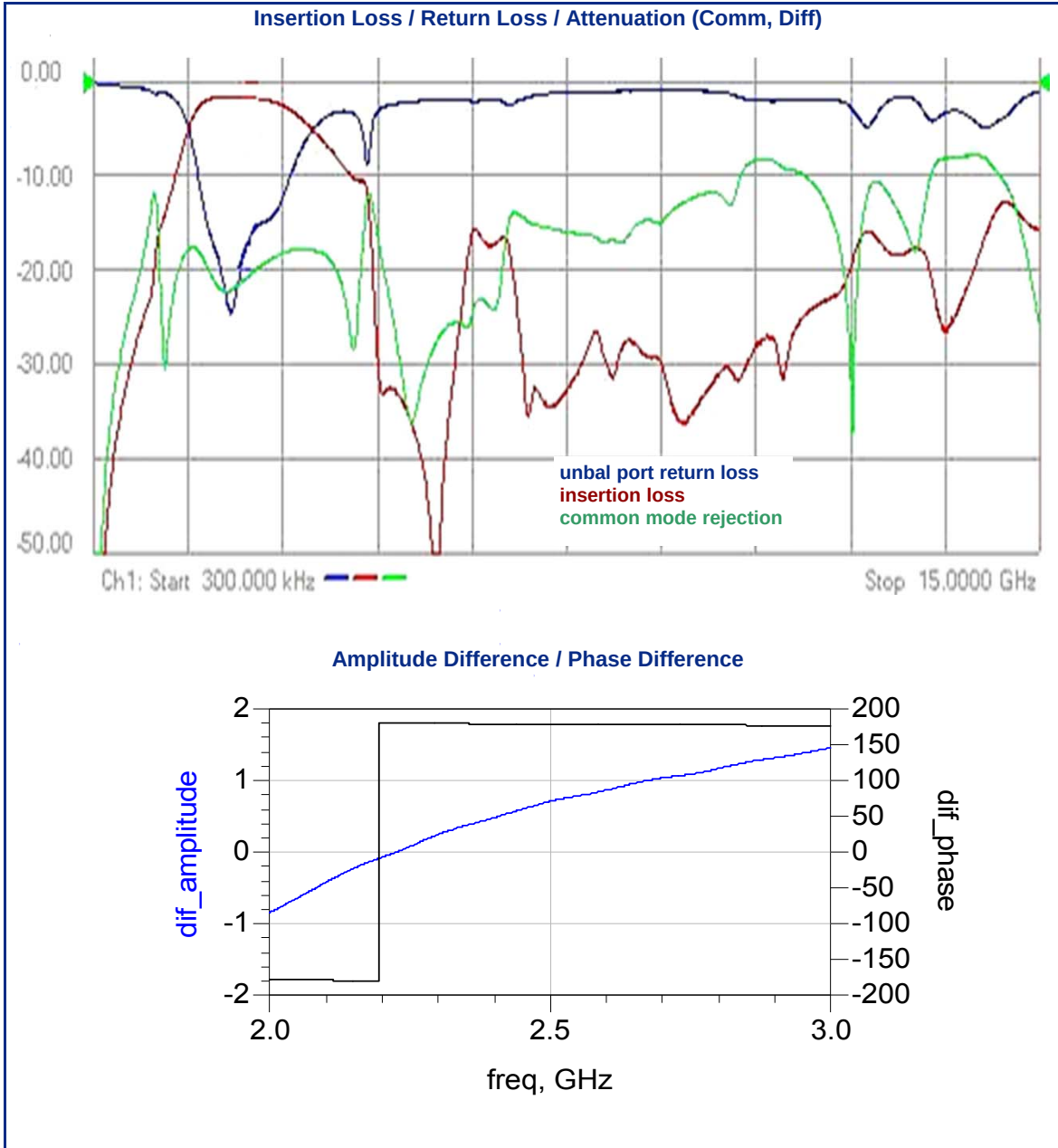
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Typical Electrical Performance (T=25°C)



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