

High Frequency Ceramic Solutions

2.45 GHz Impedance Matched Balun-Filter: Optimized for Nordic's Chipset
nRF24L01, nRF24L01+, nRF24LE1, nRF24LU1, nRF24AP2, and nRF8001

P/N 2450BM14A0002

Detail Specification: 6/13/2012

Page 1 of 2

General Specifications

Part Number	2450BM14A0002
Frequency (MHz)	2400 - 2500
Unbalanced Impedance	50 Ω
Differential Balanced Impedance	Imp. Conjugate match to Nordic nRF24L01, nRF24L01+, nRF24LE1, nRF24LU1, nRF24AP2, and nRF8001
Attenuation: Differential Mode	15 min.@4800~5000MHz 15 min.@7200~7500MHz
Attenuation: Common Mode	20 min.@4800~5000MHz

Insertion Loss	2.0 dB max.
Return Loss	9.5 dB min.
Phase Difference	160° \pm 15°
Amplitude Difference	3.5 \pm 1.5 dB
Reel Quantity	4,000
Operating Temperature	-40 to +85°C
Recommended Storage Conditions	+5 to +35°C, Humidity: 45-75%RH, 18 mos. Max

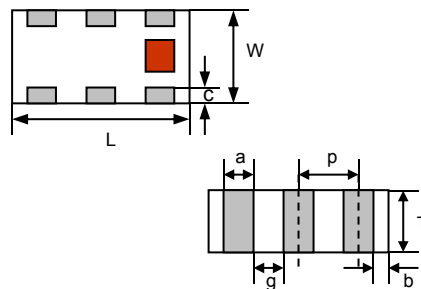
Part Number Explanation

P/N Suffix	Packaging Style*	Bulk	Suffix = S	Eg. 2450BM14A0002S
		T & R	Suffix = T	Eg. 2450BM14A0002T
	Termination Style	100% Tin	Suffix = None	Eg. 2450BM14A0002(T or S)
		Tin / Lead	Please consult Factory	

For more packaging info go to: <http://www.johansontechnology.com/ipcpackaging.html>

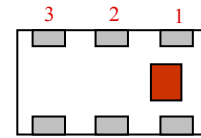
Mechanical Dimensions

	In	mm
L	0.063 \pm 0.004	1.60 \pm 0.10
W	0.031 \pm 0.004	0.80 \pm 0.10
T	0.024 \pm 0.004	0.60 \pm 0.10
a	0.008 \pm 0.004	0.20 \pm 0.10
b	0.008 \pm 0.004/-0.006	0.20 \pm 0.1/-0.15
c	0.006 \pm 0.004	0.15 \pm 0.10
g	0.012 \pm 0.004	0.30 \pm 0.10
p	0.020 \pm 0.002	0.50 \pm 0.05



Terminal Configuration

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

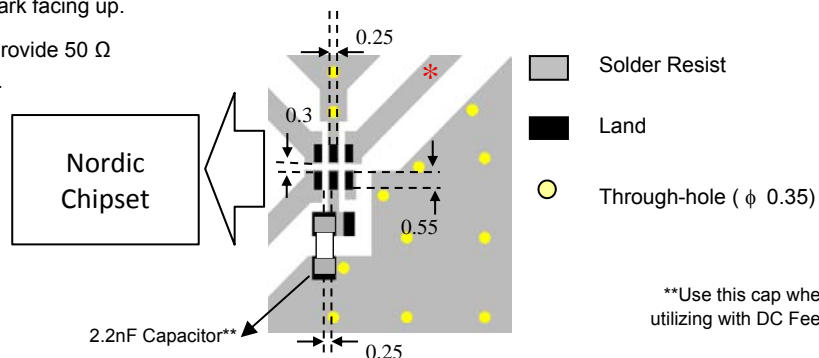


Mounting Considerations

Mount these devices with maroon mark facing up.

* Line width should be designed to provide 50 Ω impedance matching characteristics.

Units: mm



**Use this cap when utilizing with DC Feed

Johanson Technology, Inc. reserves the right to make design changes without notice.
 All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2012 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

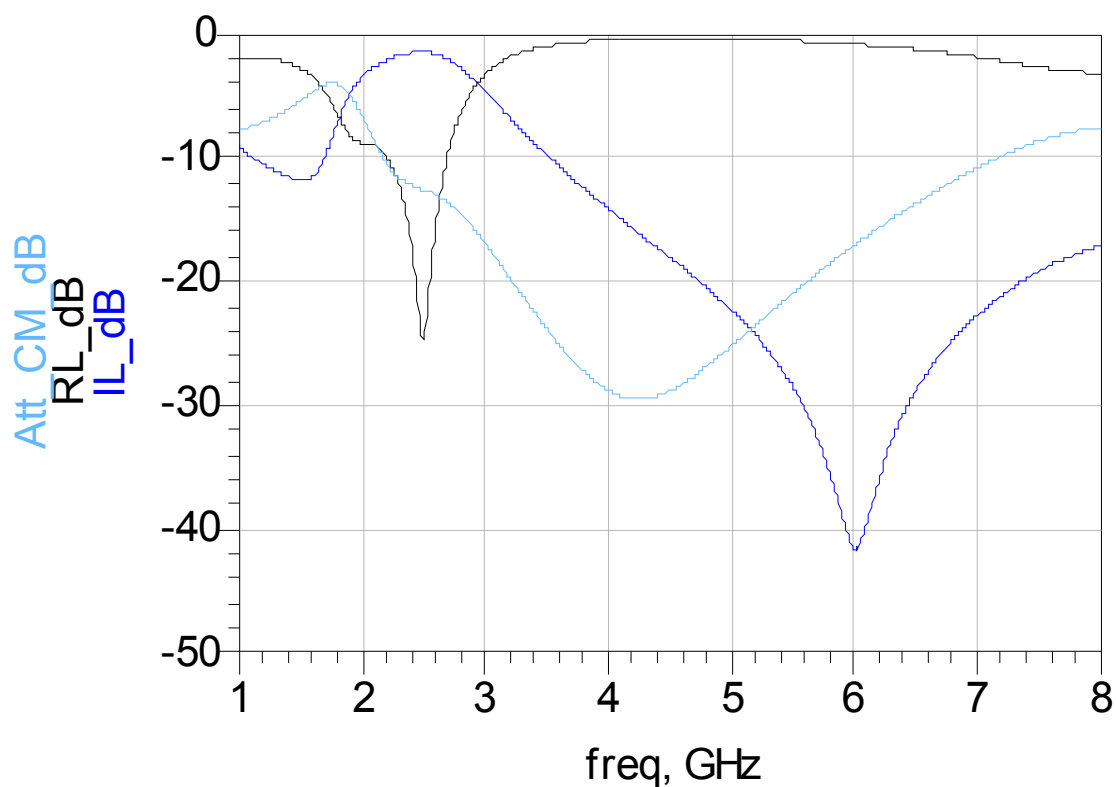
2.45 GHz Impedance Matched Balun-Filter: Optimized for Nordic's Chipset
nRF24L01, nRF24L01+, nRF24LE1, nRF24LU1, nRF24AP2, and nRF8001

P/N 2450BM14A0002

Detail Specification: 6/13/2012

Page 2 of 2

Typical RF Electrical Performance (T=25°C)



For reference design notes and additional technical info please visit our Nordic Semiconductor dedicated page at:

<http://johansontechnology.com/nordic>

Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com

4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2012 Johanson Technology, Inc. All Rights Reserved

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Johanson:

2450BM14A0002T