

High Frequency Ceramic Solutions

2.45 GHz Impedance Matched Balun-BPF: For TI CC253X, CC254X, CC257X, CC853X and CC852X Chipset family

P/N 2450BM15A0002

Detail Specification: 4/29/2013

Page 1 of 2

General Specifications

Part Number	2450BM15A0002
Frequency (MHz)	2400 - 2500
Unbalanced Impedance	50 Ω
Balanced Differential Impedance	Impedance match to T.I. CC253X, CC254X, CC257X, CC853X and CC852X Chipsets
Insertion Loss	1.5 dB max. (-40°C to +85°C)
Insertion Loss	1.7 dB max. (-40°C to +125°C)
Return Loss (-40°C to 125°C)	9.5 dB min.

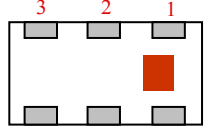
Differential Mode Attenuation (dB) -40°C to 125°C	12 min. @ 1GHz 18 min. @ 4800~5000MHz 20 min. @ 7200~7500MHz
Phase Diff. (-40°C to 125°C)	180° $\pm$ 15
Input Power	2W max.
Reel Quantity	4,000
Operating Temperature	-40°C to +125°C
Recommended Storage Conditions	+5 ~ +35 °C, Humidity 45~75%RH, 18 mos. max

Part Number Explanation

P/N Suffix	Packaging Style	Bulk	Suffix = S	Eg. 2450BM15A0002S
		T & R	Suffix = E	Eg. 2450BM15A0002E
	Termination Style	100% Tin	Suffix = None	Eg. 2450BM15A0002(E or S)
	Evaluation Board	2450BM15A0002-EBSMA		

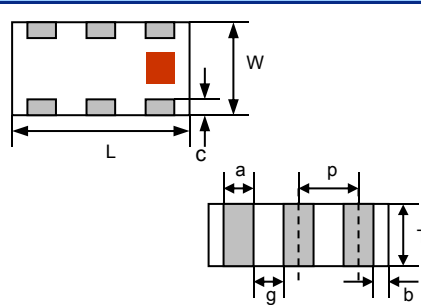
Terminal Configuration

No.	Function
1	Unbalanced Port
2	GND
3	Balanced Port
4	Balanced Port
5	GND
6	GND



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	0.028 $\pm$ 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

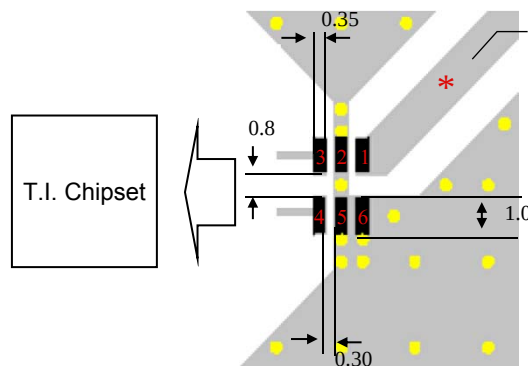


Mounting Considerations

Mount these devices with brown mark facing up. Units: mm

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

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



Note: No DC Blocking Capacitor required (internal)

Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.

JOHANSON TECHNOLOGY

www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver 1.2

2013 Johanson Technology, Inc. All Rights Reserved

High Frequency Ceramic Solutions

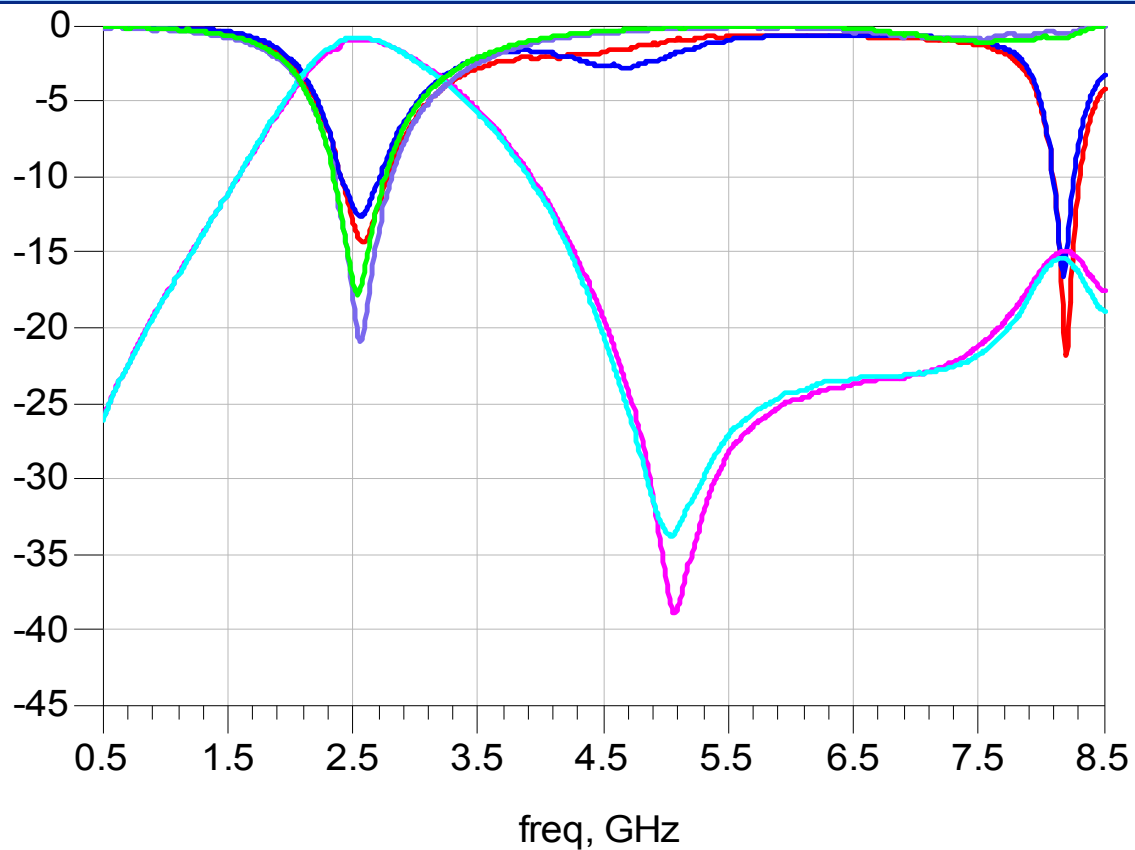
2.45 GHz Impedance Matched Balun-BPF: For TI CC253X, CC254X, CC257X, CC853X and CC852X Chipset family

P/N 2450BM15A0002

Detail Specification: 4/29/2013

Page 2 of 2

Typical Electrical Performance at 25°C and 125°C

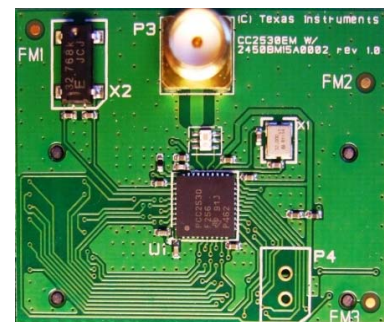


25°C Unbalanced RL 25°C Balanced Return Loss 25°C Insertion Loss/Attenuation (Differential Mode)
125°C Unbalanced RL 125°C Balanced Return Loss 125°C Insertion Loss/Attenuation (Differential Mode)

Technical notes and Reference Designs

Technical Note:
www.johansontechnology.com/CC2530AppNote

Gerber Files and TI Reference Notes:
<http://www.ti.com/tool/cc2530balun-refdes>



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

JOHANSON
TECHNOLOGY



www.johansontechnology.com

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

Ver 1.2

2013 Johanson Technology, Inc. All Rights Reserved