



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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

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## 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.

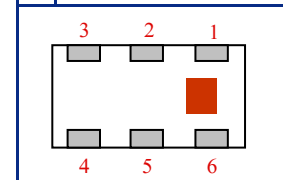
Differential Mode Attenuation (dB) -40°C to 125°C	12 min. @ 1GHz 18 min. @ 4800~5000MHz 20 min. @ 7200~7500MHz
Phase Diff. (-40°C to 125°C)	180° ± 15
Input Power	2W max.
Reel Quantity	4,000
Operating Temperature	-40°C to +125°C
Recommended Storage Conditions	+5 ~ +35 °C, Humidity 45~75%RH, 18 mos. max

## Part Number Explanation

P/N	Packaging Style	Bulk	Suffix = S	Eg. 2450BM15A0002S
		T & R	Suffix = E	Eg. 2450BM15A0002E
Suffix	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

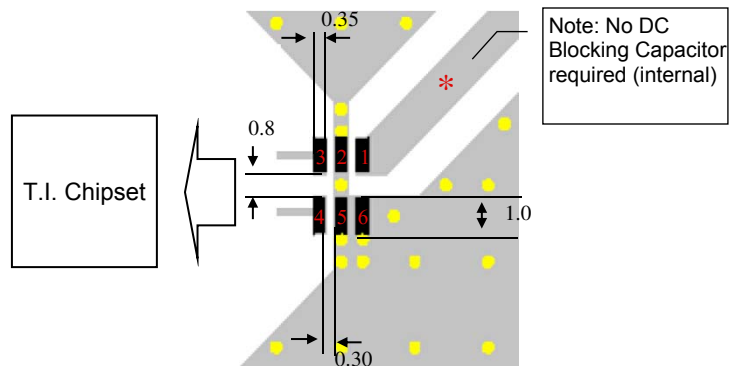
	In	mm
L	0.079 ± 0.004	2.00 ± 0.10
W	0.049 ± 0.004	1.25 ± 0.10
T	0.028 ± 0.004	0.70 ± 0.10
a	0.012 ± 0.004	0.30 ± 0.10
b	0.008 ± 0.004	0.20 ± 0.10
c	0.012 +.004/-0.008	0.30 +0.1/-0.2
g	0.014 ± 0.004	0.35 ± 0.10
p	0.026 ± 0.002	0.65 ± 0.05

## 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 (∅0.3)



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

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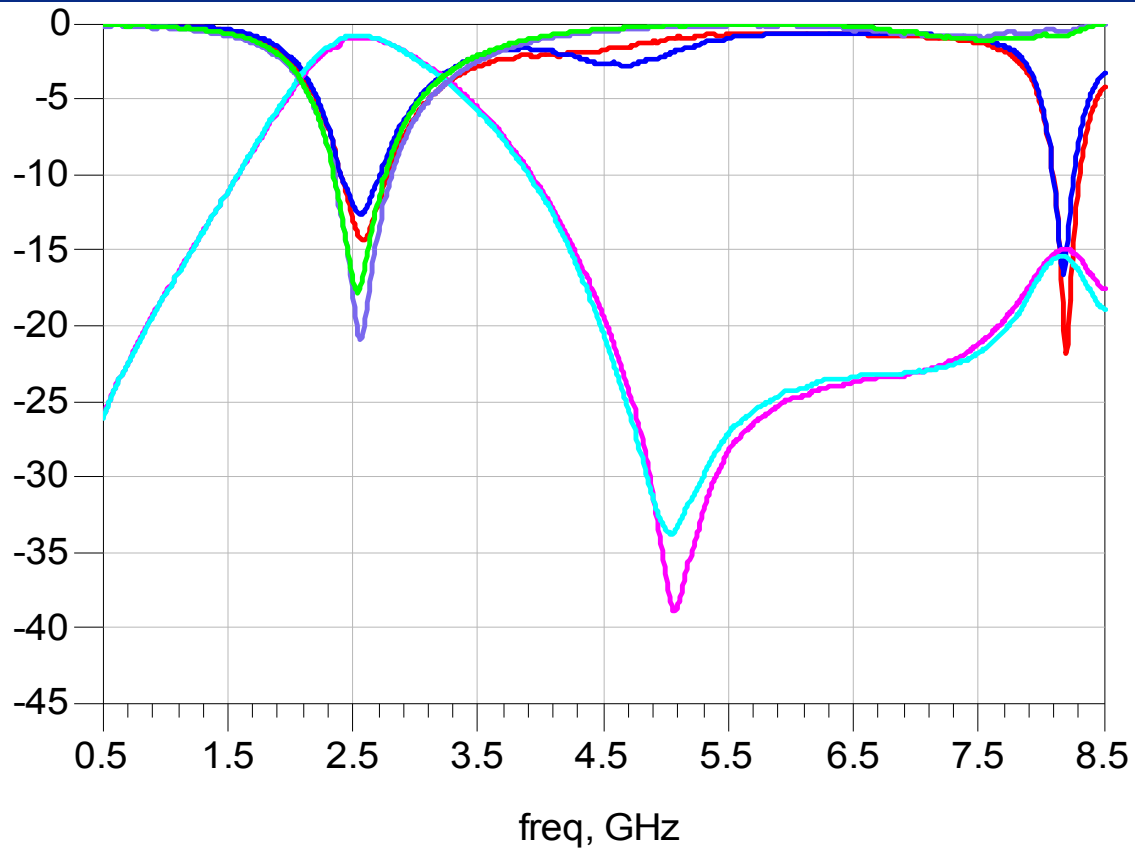
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Typical Electrical Performance at 25°C and 125°C



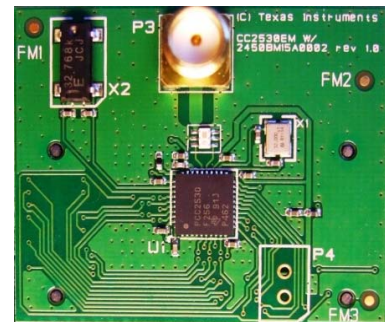
25°C Unbalanced RL      25°C Balanced Return Loss      25°C Insertion Loss/Attenuation (Differential Mode)

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](http://www.johansontechnology.com/CC2530AppNote)

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



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