

# High Frequency Ceramic Solutions

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

**P/N 2450BM15A0002**

Detail Specification: 3/15/2012

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## General Specifications

<b>Part Number</b>	2450BM15A0002
<b>Frequency (MHz)</b>	2400 - 2500
<b>Unbalanced Impedance</b>	50 $\Omega$
<b>Balanced Impedance</b>	Impedance match to T.I. CC253X, CC254X, CC257X and CC852X Chipsets
<b>Insertion Loss</b>	1.5 dB max.
<b>Differential Mode Attenuation (dB)</b>	15 min.@ 4800~5000MHz
	20 min.@ 7200~7500MHz

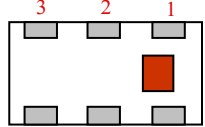
<b>Return Loss</b>	10.0 dB min.
<b>Phase Difference</b>	180° $\pm$ 15
<b>Input Power</b>	2W max.
<b>Reel Quantity</b>	4,000
<b>Operating Temperature</b>	-40 to +85°C
<b>Storage Temperature Range</b>	+5 ~ +35 °C, Humidity 45~75%RH, 12 mos. max

TECHNICAL NOTES, go to: <http://johansontechnology.com/en/integrated-passives/chipset-specific-baluns/texas-instruments-ti.html>

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

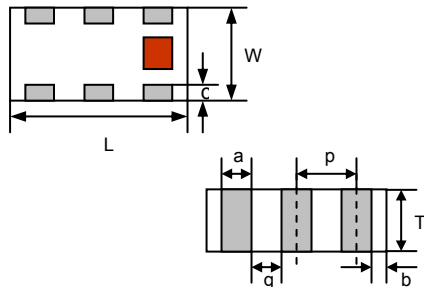
## Terminal Configuration

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



## Mechanical Dimensions



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



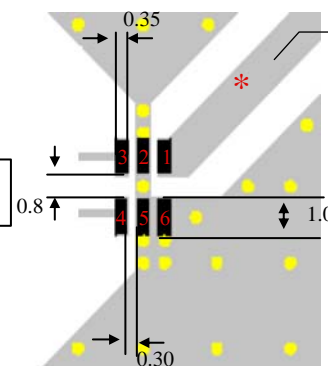
## Mounting Considerations

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

\* Line width should be designed to provide 50  $\Omega$  impedance matching characteristics.

-  Solder Resist
-  Land
-  Through-hole ( $\phi$ 0.3)

T.I. Chipset



Note: No DC Blocking Capacitor required (internal)

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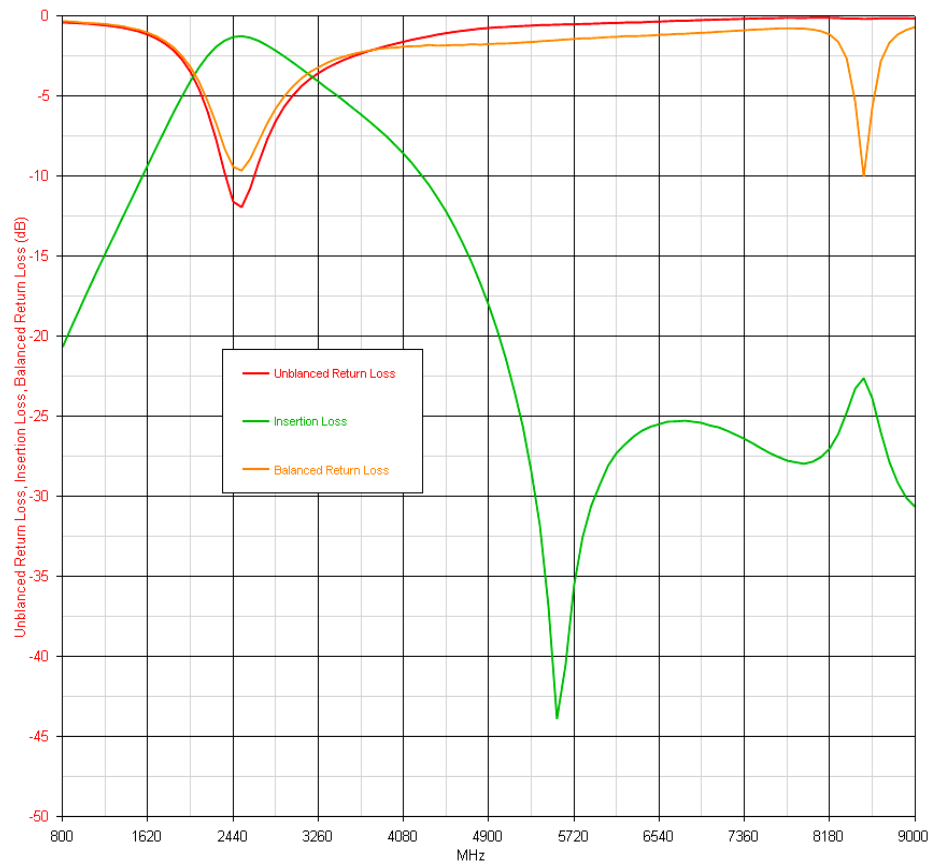
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## Typical Electrical Performance (T=25°C)



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