

# High Frequency Ceramic Solutions

## 2.45GHz Directional Coupler/Low Pass Filter Combo Passive

P/N 2450CF15A0100

Detail Specification: 01/20/2012

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### General Specifications

Part Number	2450CF15A0100
Frequency (MHz)	2400 - 2500
Insertion Loss	0.8 dB max.
Return Loss	20 dB min.
Attenuation (min.)	20 dB @ 2 x Fo
Coupling	15 ± 1 dB
Isolation	22 dB min.

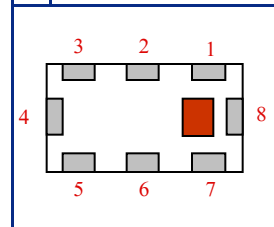
Impedance	50 Ω
Operating Temperature	-40 to +85°C
Storage Conditions	+5 to +35°C, Humidity 45~75%RH, 18 months max.
Reel Quantity	4000
Power (max.)	2W

P/N	Packaging Style*	Bulk	Suffix = S	Eg. 2450CF15A0100S
		T & R	Suffix = E	Eg. 2450CF15A0100E
Suffix	Termination Style	100% Tin	Suffix = None	Eg. 2450CF15A0100(E or S)
		Tin / Lead	Suffix = /Pb	Eg. 2450CF15A0100(E or S)/Pb
Evaluation Board (2-Port SMA EVB)		2450CF15A0100-EB-SMA		

\*<http://johansontechnology.com/en/integrated-passives/integrated-passive-tape-a-reel-packaging.html>

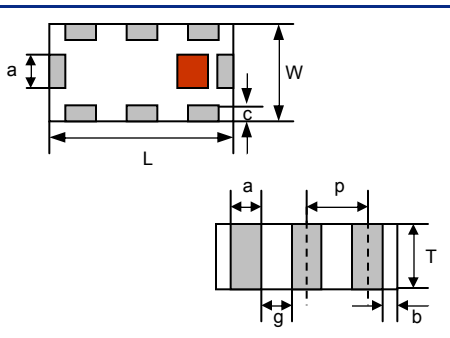
### Terminal Configuration

No.	Function
1	Termination
2	GND
3	GND
4	Input
5	Coupled Out
6	GND
7	GND
8	Output



### Mechanical Dimensions

	In	mm
L	0.079 ± 0.004	2.00 ± 0.10
W	0.049 ± 0.004	1.25 ± 0.10
T	0.027 ± 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 +0.004/-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



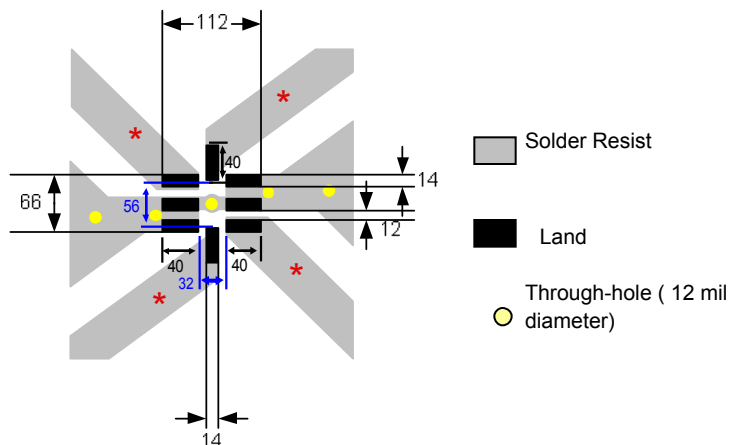
### Mounting Considerations

Mount these devices with brown mark facing up.

Line width should be designed to provide 50 ohm impedance, depending on PCB material and thickness

Units: mils

\* Line width should be designed to provide 50 ohm impedance, depending on PCB material and thickness



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

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

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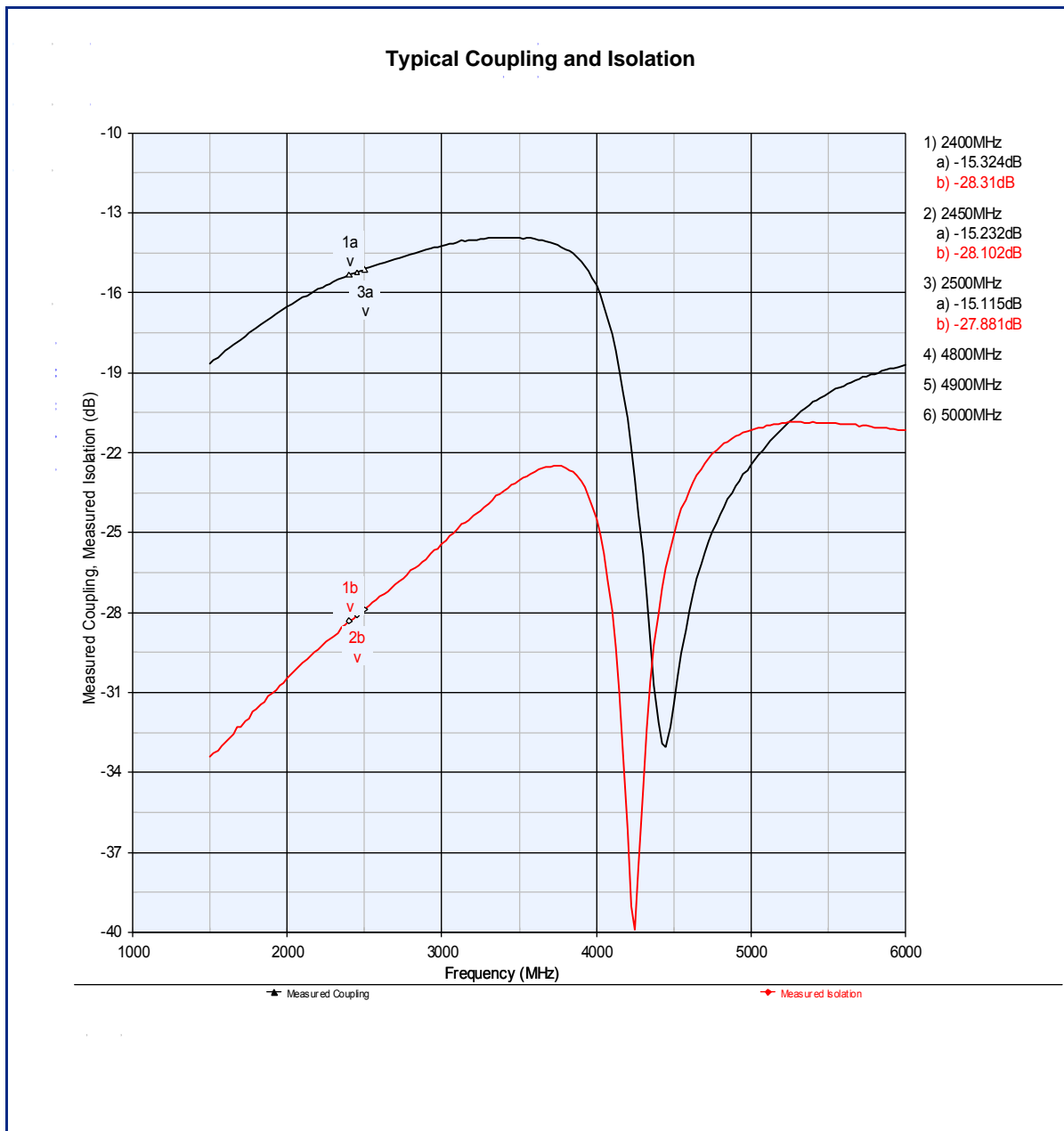
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## Typical Electrical Performance (T=25°C)



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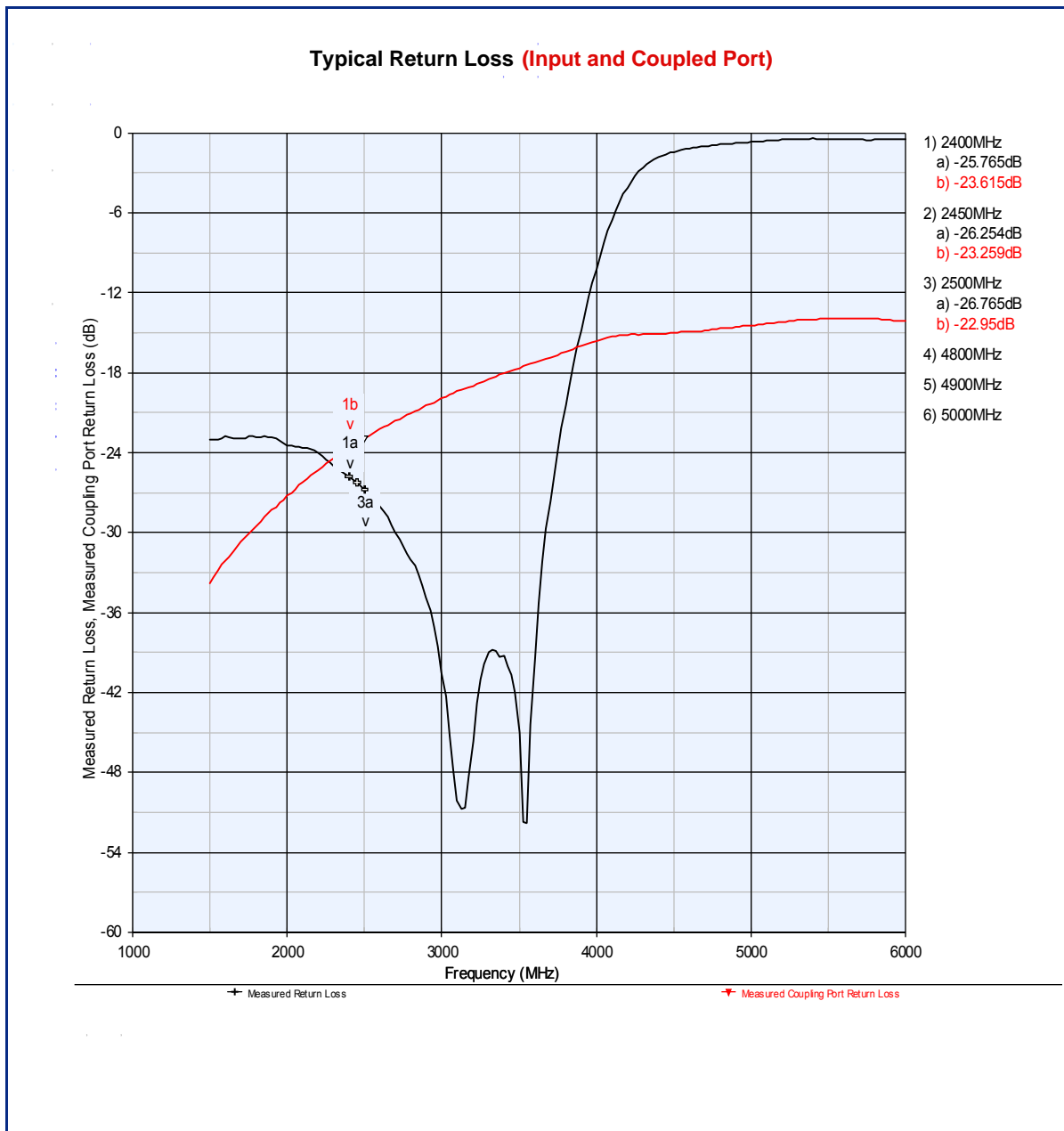
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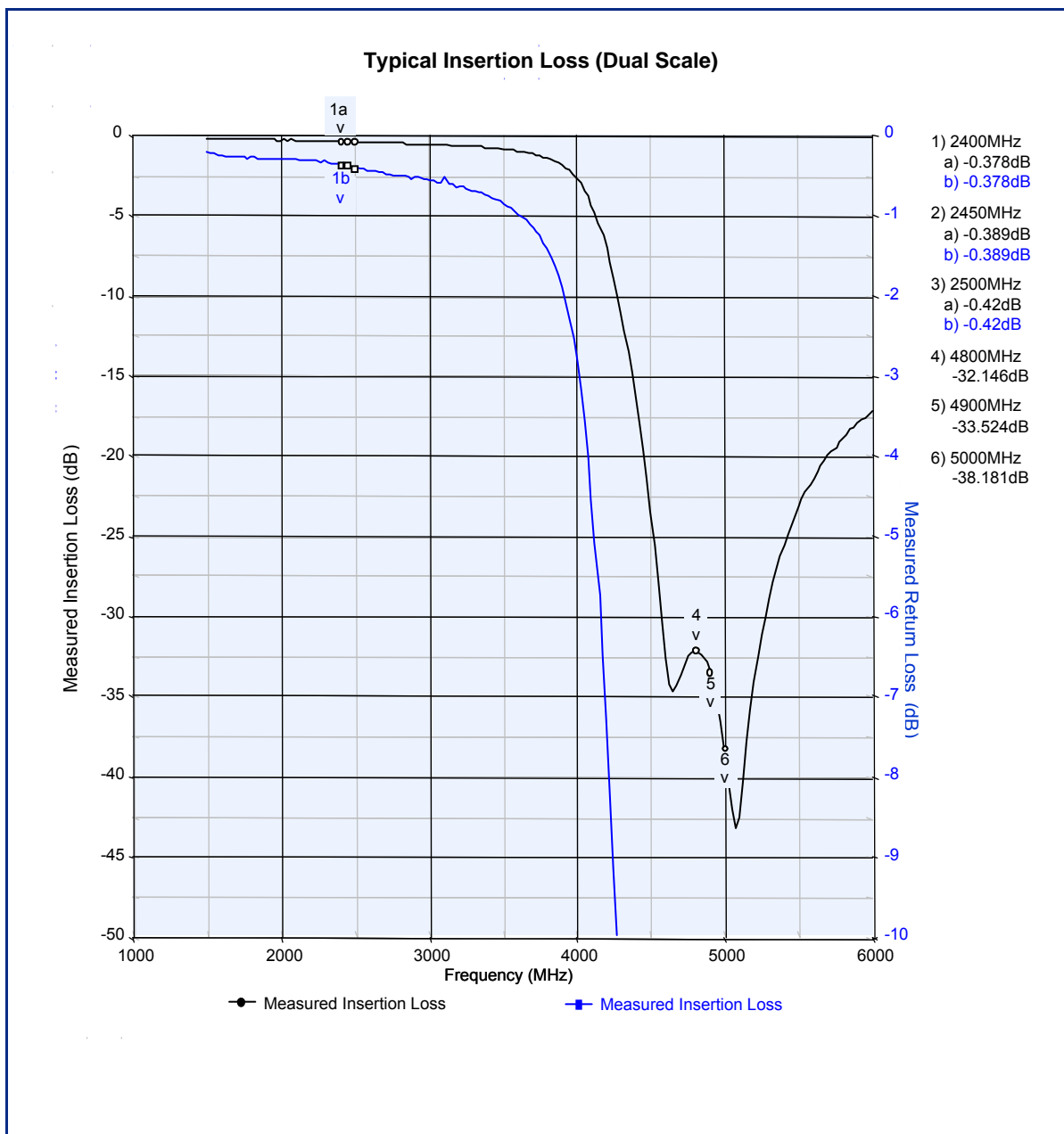
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