

# High Frequency Ceramic Solutions

1.85GHz LPF EIA 0806 (2.0x1.5x0.98mm) extra attenuation behavior

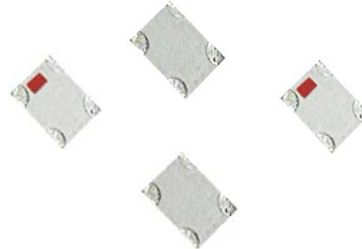
P/N 1850LP16A0105

Detail Specification: 09/24/15

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## General Specifications

Frequency Range (MHz)	1805 - 1910
Insertion Loss (dB)	0.4 max.
Ripple (dB)	0.4 max. @ BW
Return Loss	1.7 max.
Attenuation (dB)	30 min. @3.61 - 3.82GHz
Attenuation (dB)	20 min. @5.415-5.73GHz
Operating Temp. Range	-40 to +85° C
Storage Temp. Range	-40 to +85° C
Storage Period	18 months max.



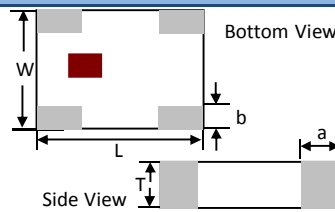
Recommended Storage Conditions of <u>uninstalled</u> product still on T&R	+5 ~ +35 °C, Humidity 45~75%RH, 18 mos. Max	<b>Power Capacity</b>	4W max (CW).
		<b>Q'ty/Reel (pcs)</b>	4,000

## Part Number Explanation

P/N Suffix	Packing Style	Bulk	Suffix = S	1850LP16A0105S
		T & R	Suffix = E	1850LP16A0105E (Reel Size: 4000pcs)
	Termination style	Ni/Sn	Suffix = None	1850LP16A0105(E/R/S)
	50Ω SMA Connector Eval Board			1850LP16A0105-EB1SMA (orderable p/n)

## Mechanical Dimensions

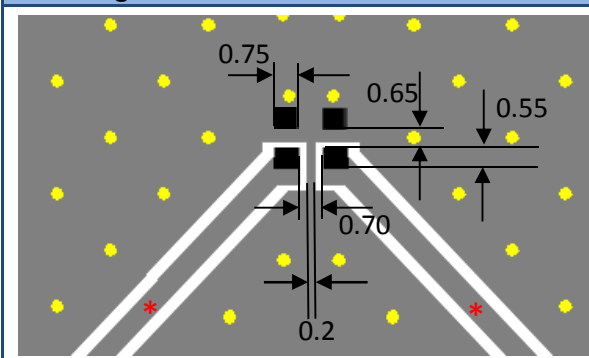
	In	mm
L	0.080 ± 0.004	2.03 ± 0.10
W	0.061 ± 0.004	1.55 ± 0.10
T	0.039 ± 0.006	0.98 ± 0.15
a	0.022 ± 0.010	0.56 ± 0.25
b	0.014 ± 0.006	0.35 ± 0.15



## Terminal Configuration

1	IN	3	GND
2	OUT	4	GND

## Mounting Considerations



Would you like the layout file of this filter or need help with the RF layout? Contact our RF Applications Engineering team at: [www.johansontechnology.com/ask-a-question](http://www.johansontechnology.com/ask-a-question)

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

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

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Ver. 1.0

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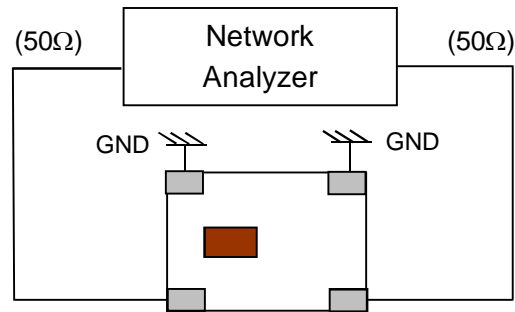
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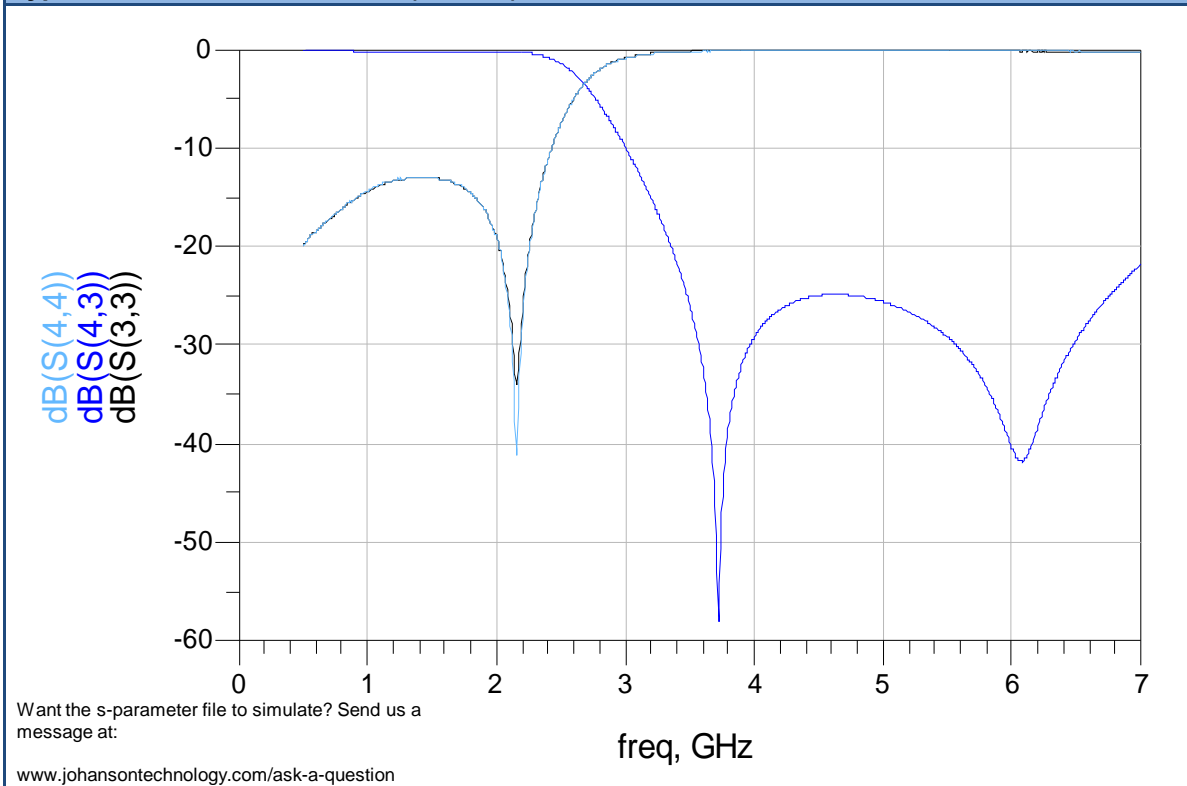
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## Measuring Diagram



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



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## To Download Measured S-parameters for Evaluation and Simulation:

[www.johansontechnology.com/low-pass-filters](http://www.johansontechnology.com/low-pass-filters)

## Antenna layout and tuning techniques (How to obtain the new antenna matching values)

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

## Antenna layout review, tuning, and characterization services

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

## Soldering Information

[www.johansontechnology.com/ipcsoldering-profile](http://www.johansontechnology.com/ipcsoldering-profile)

## RoHS Compliance

[www.johansontechnology.com/technical-notes/rohs-compliance.html](http://www.johansontechnology.com/technical-notes/rohs-compliance.html)

## MSL Info

[www.johansontechnology.com/technical-notes/msl-rating.html](http://www.johansontechnology.com/technical-notes/msl-rating.html)

## Packaging information

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

## For layout review contact our Applications Team at:

[www.johansontechnology.com/ask-a-question](http://www.johansontechnology.com/ask-a-question)

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