

High Frequency Ceramic Solutions

UWB Band Pass Filter, EIA 0805, High Rejection

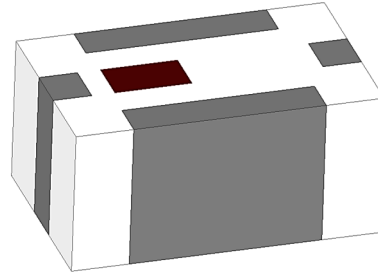
P/N 7000BP15A1600

Detail Specification: 11/26/2019

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General Specifications

Part Number	7000BP15A1600
Frequency (MHz)	6200 - 7800
Impedance (Ohm)	50
Insertion Loss (dB)	1.75 typ. / 2.0 max.
Return Loss (dB)	12 typ. / 10 min.
Group Delay (ns)	0.7 typ. / 1.0 max.
ESD Susceptibility (HBM)	2000V
ESD Susceptibility (CDM)	500V
Power Capacity	3W max. (CW)



Frequency (MHz)	Attenuation (dB)	Operating Temperature	
2400 - 3400	39 typ. / 30 min.		-40 to +85°C
3400 - 3800	39 typ. / 35 min.	Storage Temperature	-40 to +85°C
4200 - 5400	39 typ. / 30 min.	Recommended Storage Conditions and Period for unused T&R Product	+5 to +35°C, : 45~75%RH, 18 months max.
5850	5 typ. / 3 min.		
8500 - 16000	30 typ. / 25 min.	Reel Quantity	4,000

P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 7000BP15A1600S
		T & R	Suffix = E	eg. 7000BP15A1600E
	Evaluation Board	7000BP15A1600-EB1SMA (2 Female SMA connectors 50Ω)		

For more band-pass filters, go to: <https://www.johansontechnology.com/band-pass-filters>

Mechanical Specifications

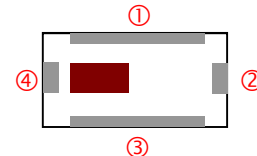
	In	mm
L	0.079 ± 0.006	2.00 ± 0.15
W	0.049 ± 0.004	1.25 ± 0.10
T	0.037 ± 0.004	0.95 ± 0.10
a	0.049 ± 0.006	1.25 ± 0.15
b	0.012 ± 0.006	0.30 ± 0.15
c	0.010 ± 0.006	0.25 ± 0.15
d	0.014 ± 0.006	0.35 ± 0.15

(Top) (Side)

Want the mechanical model or layout file of the above? Send us a message at: <https://www.johansontechnology.com/ask-a-question>

Terminal Configuration

No.	Function	No.	Function
1	GND	3	GND
2	IN/OUT	4	IN/OUT



If you would like the measured s-parameters, contact us at:

<https://www.johansontechnology.com/ask-a-question>

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Ver. 1.2

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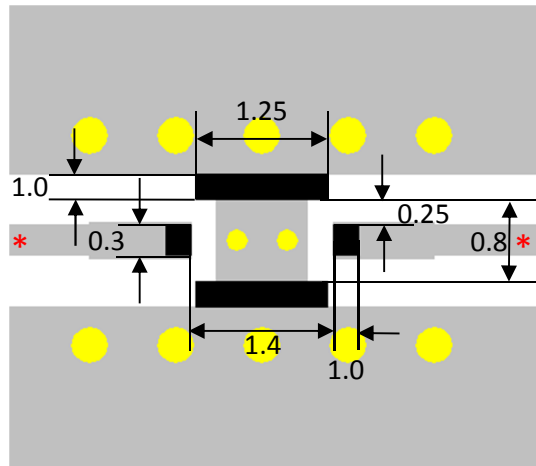
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Mounting Considerations



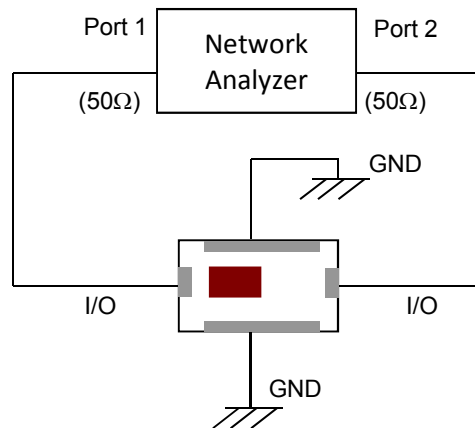
Units in mm

- Solder
- Resist Land
- Through-hole (ϕ 0.2 / ϕ 0.35)

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

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Measuring Diagram



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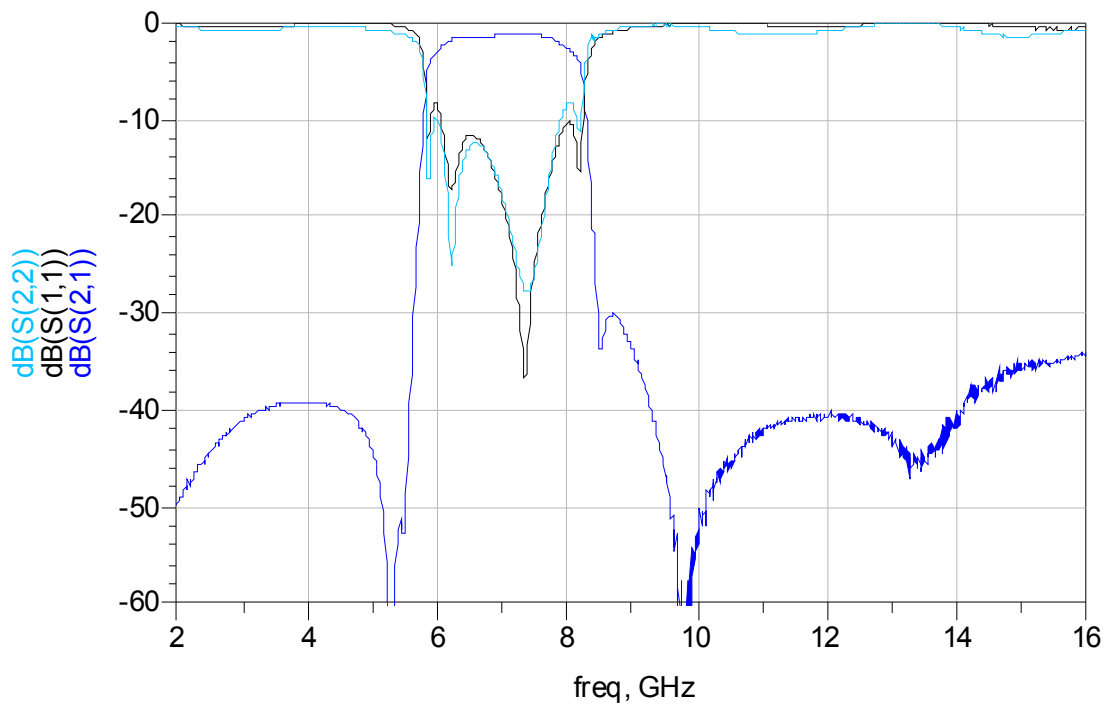
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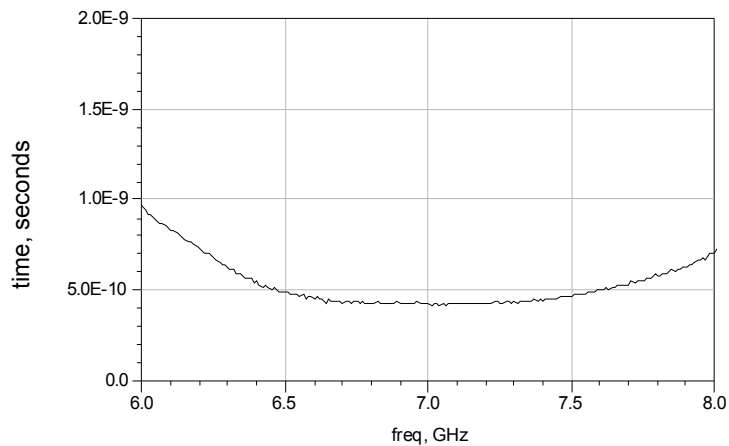
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Typical Electrical Characteristics (T=25°C)

Insertion Loss, Return Loss, Harmonic Attenuation



Group Delay



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More BPF info such as measured s-parameters and ordering details at:

<https://www.johansontechnology.com/band-pass-filter>

UWB mini embedded Antennas

<https://www.johansontechnology.com/antennas>

Soldering Information

<https://www.johansontechnology.com/ipcsoldering-profile>

MSL Info

<https://www.johansontechnology.com/msl-rating>

Recommended Storage Condition and Max Shelf Life

<https://www.johansontechnology.com/recommended-storage-conditions>

RoHS Compliance

<https://www.johansontechnology.com/rohs-compliance>

Layout review services

<https://www.johansontechnology.com/ask-a-question>

Antenna layout review, tuning, and characterization services

<https://www.johansontechnology.com/ipc-antenna-services>

Packaging information

<https://www.johansontechnology.com/tape-reel-packaging>

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