

High Frequency Ceramic Solutions

7GHz Band Pass Filter, EIA 0805, High Rejection,
AEC-Q200 Qualified

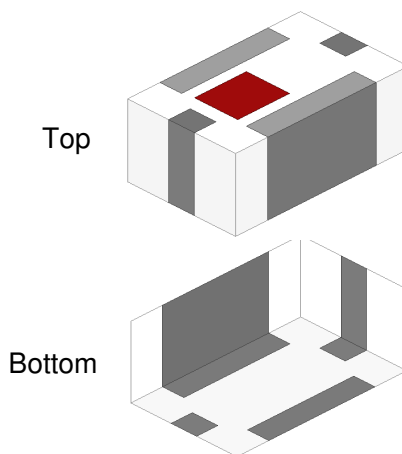
P/N 7000BP15A1600E-AEC

Detail Specification: 10/8/2021

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General Specifications

Part Number	7000BP15A1600E-AEC		
Frequency (MHz)	6200 - 7800		
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.)		
Attenuation (dB)	39 typ. (30 min.) @2400 - 3400MHz 39 typ. (35 min.) @3400 - 3800MHz 35 typ. (30 min.) @4200 - 5400MHz 5 typ. (3 min.) @5850MHz 30 typ. (25 min.) @8500 - 16000MHz		
ESD Susceptibility (HBM)	2000V min.		
ESD Susceptibility (CDM)	500V min.		
Power Capacity (W)	3 max. (CW)	Recommended Storage Conditions and Period for unused Product on T&R	+5 to +35°C
Operating Temperature	-40 to +105°C		Humidity 45 - 75% RH
Reel Quantity (pcs./reel)	4,000		18 months max.



You can download measured s-parameters of this component at: <https://www.johansontechnology.com/band-pass-filters>

Part Number Explanation

P/N Suffix	Packaging Style	Bulk (loose pcs.)	Suffix = S	E.g. 7000BP15A1600S-AEC
		T & R	Suffix = E	E.g. 7000BP15A1600E-AEC
	Evaluation Board	50Ω SMA	Suffix = EB1SMA	E.g. 7000BP15A1600-EB1SMA

Mechanical Dimensions

	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

Terminal Configuration

No.	Function
1	GND
2	INPUT / OUTPUT
3	GND
4	INPUT / OUTPUT

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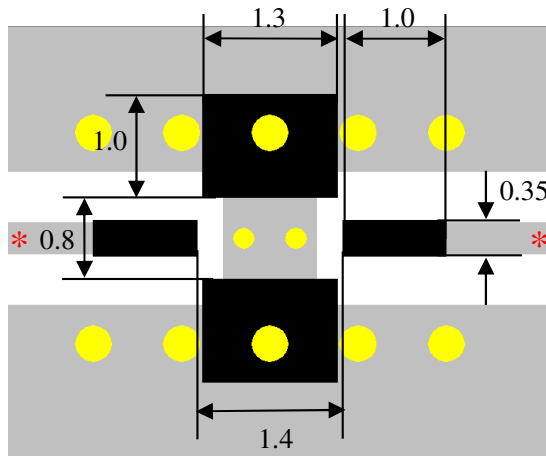
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Mounting Considerations



Units in mm

■ Solder Resist

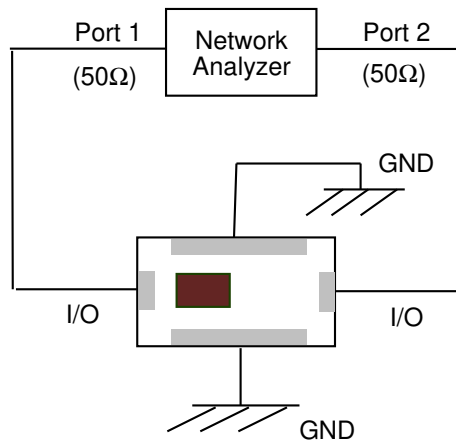
■ Land

● Through-hole ($\phi 0.2 / \phi$)

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

Would you like the layout? Send us a message at: <https://www.johansontechnology.com/ask-a-question>

Measuring Diagram



Port 1: Filter IN/OUT
Port 2: Filter IN/OUT

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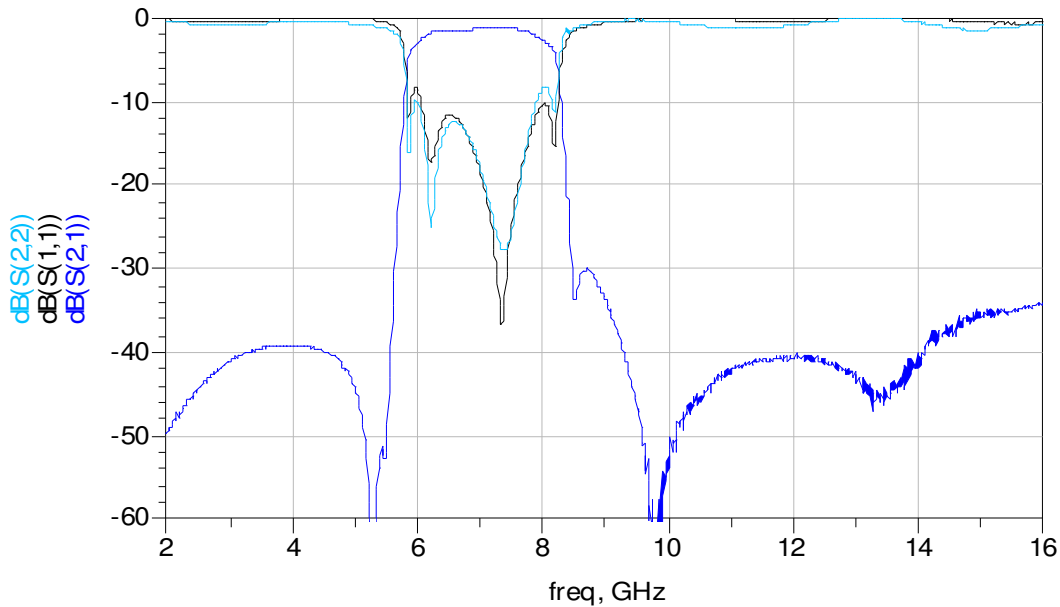
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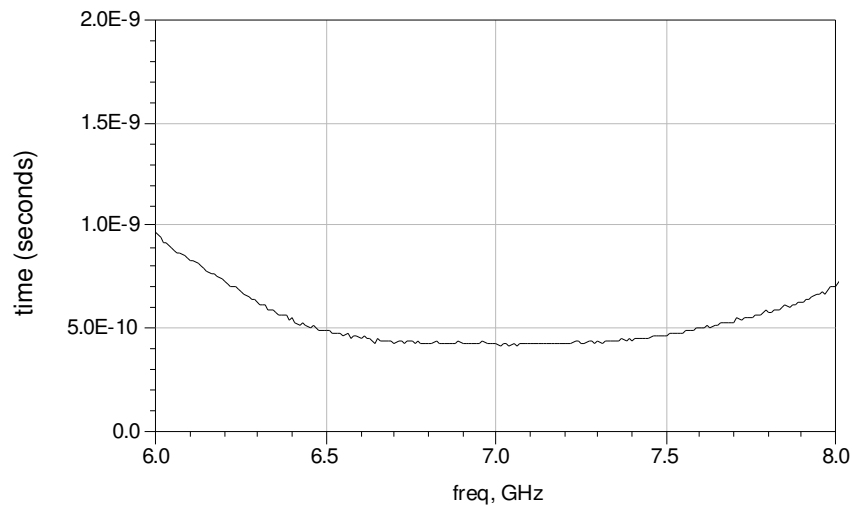
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Typical Electrical Characteristics (T=25°C)

Insertion Loss & Return loss



Group Delay



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Application Notes, Layout Files, and more

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

Packaging information

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

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>

Antenna layout and tuning techniques

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

Antenna layout review, tuning, and characterization services

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

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