

# High Frequency Ceramic Solutions

4.7GHz Band Pass Filter, EIA 0603, SMD, Low Loss and High Attenuation

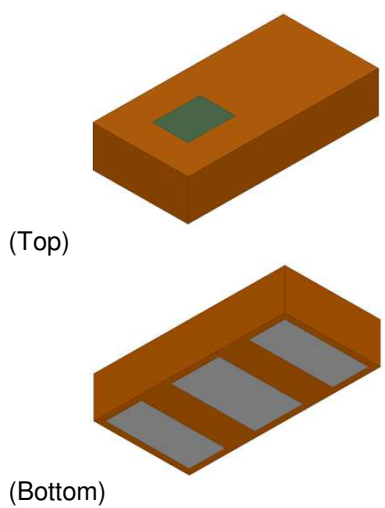
P/N 4700BP14C0600

Detail Specification: 12/4/2020

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## General Specifications

Part Number	4700BP14C0600
Frequency (MHz)	4400 - 5000
Insertion loss (dB)	1.15 typ. (1.5 max.)
Return Loss (dB)	19 typ. (10 min.)
Power Capacity (W)	3 max. (CW)
Operating Temperature	-40 to +85°C
Reel Quantity (pcs/reel)	4,000
Attenuation (dB)	
400 - 915 MHz	46 typ. (35 min.)
925 - 2485 MHz	43 typ. (30 min.)
2485 - 3600 MHz	31 typ. (20 min.)
5850 - 6100 MHz	22 typ. (7 min.)
6100 - 6980 MHz	21 typ. (15 min.)
8800 - 10000 MHz	32 typ. (25 min.)
13200 - 15000 MHz	39 typ. (20 min.)
Recommended Storage Conditions and Period for unused T&R product	+5 to +35°C Humidity 45 - 75% RH 18 months max.



**\*12 months in vacuum sealed bag and 1 week after opening. Please keep unused parts in vacuum sealed bags.**

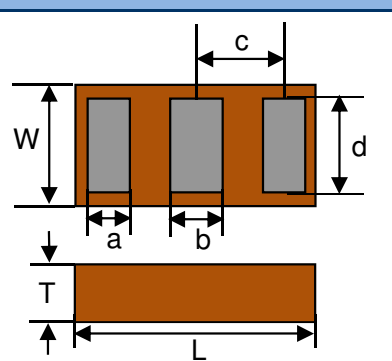
For more info on handling and soldering profile, go to: <https://www.johansontechnology.com/index.php/silverleads-profile>

## Part Number Explanation

P/N Suffix	Packaging Style	Bulk	Suffix = S	e.g. 4700BP14C0600S
		T & R	Suffix = T	e.g. 4700BP14C0600T
	Termination Style	Ag/Pt	Suffix = None	e.g. 4700BP14C0600(S or T)
	Evaluation Board	50Ω SMA	Suffix = EB1SMA	e.g. 4700BP14C0600-EB1SMA

## Mechanical Dimensions

	In	mm
L	0.063 ± 0.004	1.60 ± 0.10
W	0.031 ± 0.004	0.80 ± 0.10
T	0.014 max.	0.35 max.
a	0.012 ± 0.004	0.30 ± 0.10
b	0.016 ± 0.004	0.40 ± 0.10
c	0.024 ± 0.004	0.60 ± 0.10
d	0.028 ± 0.004	0.70 ± 0.10



## Terminal Configuration

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

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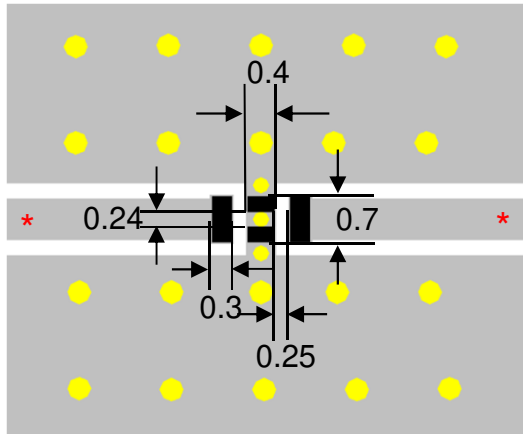
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## Mounting Pad Dimensions

Units in mm



■ Solder Resist

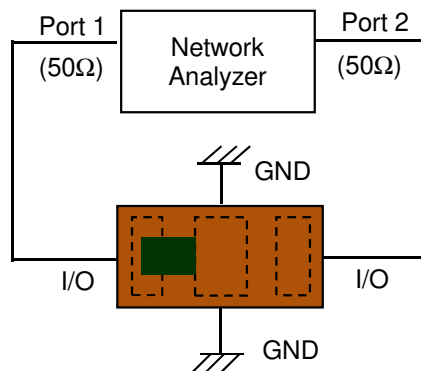
■ Land

● GND Via ( $\phi$  0.35, 0.23)

\*Transmission line width should be designed to match 50 $\Omega$  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>

## Measurement Schematic



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

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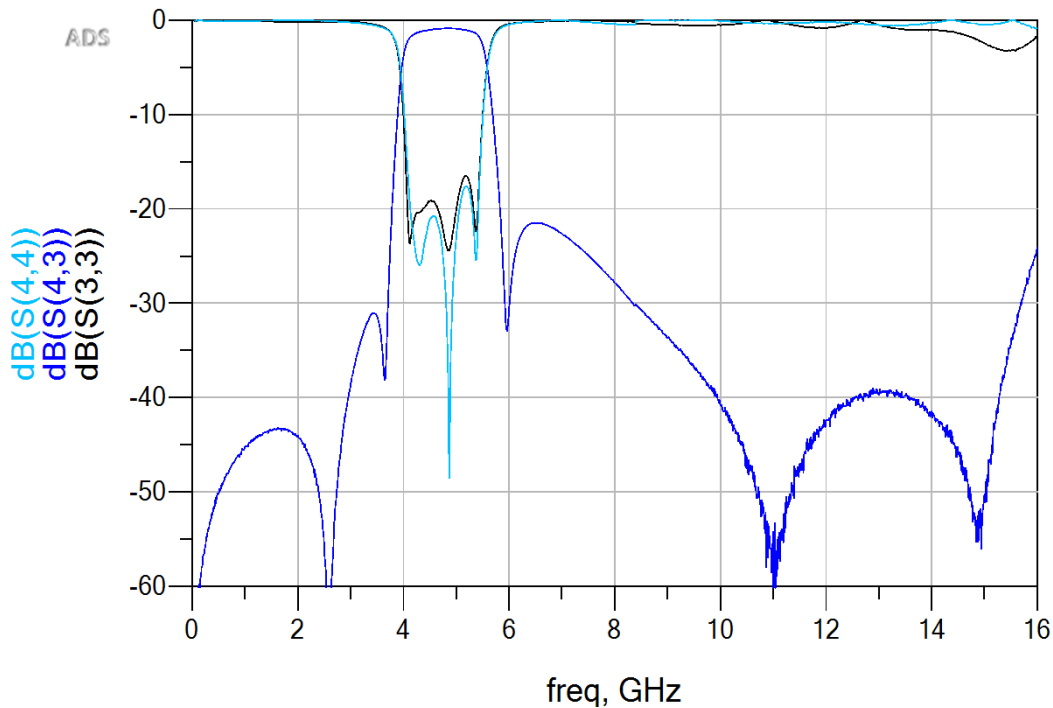
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## Typical Electrical Characteristics (T=25°C)

### Insertion Loss & Return loss



Do you need the S-parameter file of the above? Send us a message at:  
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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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