

# High Frequency Ceramic Solutions

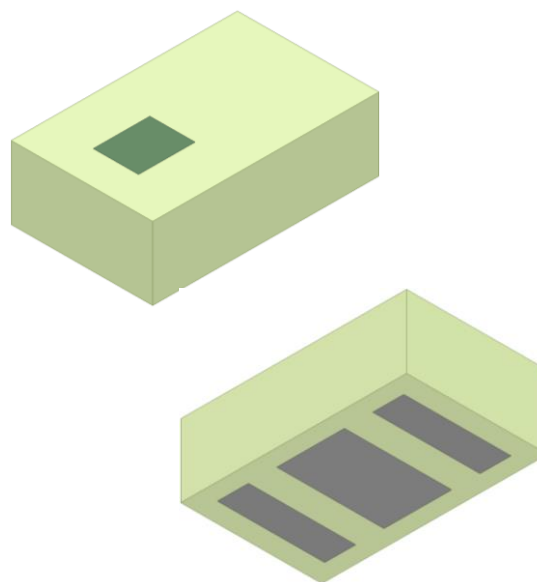
4.7GHz Band Pass Filter, EIA 0805, SMD, Low Loss and High Attenuation

P/N 4700BP15A0600

Detail Specification: 4/6/2020

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| General Specifications    |                     |
|---------------------------|---------------------|
| Part Number               | 4700BP15A0600       |
| Operating Frequency (MHz) | 4400 - 5000         |
| Insertion loss (dB)       | 0.7 typ. (0.9 max.) |
| Return Loss (dB)          | 10 min.             |
| Power Capacity (W)        | 3 max. (CW)         |
| Attenuation (dB)          |                     |
| 500 - 2690 MHz            | 36 typ. (30 min.)   |
| 2700 - 3800 MHz           | 18 typ. (15 min.)   |
| 8800 - 10000 MHz          | 30 typ. (15 min.)   |
| 13200 - 15000 MHz         | 30 typ. (15 min.)   |



|                                                       |                                                      |
|-------------------------------------------------------|------------------------------------------------------|
| Operating Temperature                                 | -40°C to +85°C                                       |
| Reel Quantity (pcs/reel)                              | 4,000                                                |
| Recommended Storage Conditions for unused T&R product | +5 to +35°C<br>Humidity 45 - 75%RH<br>18 months max. |

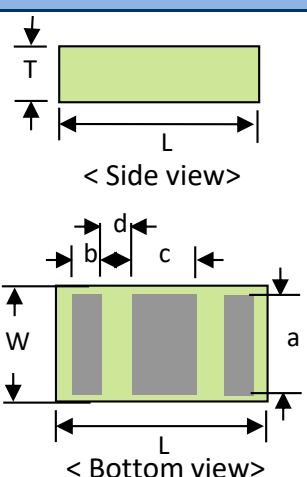
You can download measured s-parameters of this component at: <https://www.johansontechnology.com/band-pass-filters>

## Part Number Explanation

| P/N Suffix | Packaging Style  | Bulk    | Suffix = S      | E.g. 4700BP15A0600S       |
|------------|------------------|---------|-----------------|---------------------------|
|            |                  | T & R   | Suffix = E      | E.g. 4700BP15A0600E       |
|            | Evaluation Board | 50Ω SMA | Suffix = EB1SMA | E.g. 4700BP15A0600-EB1SMA |

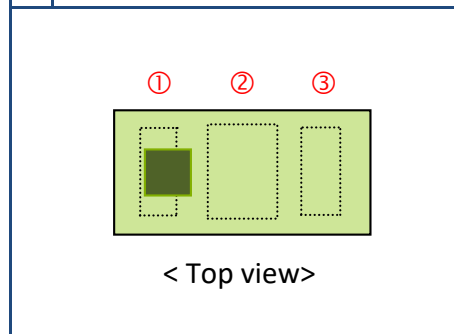
## Mechanical Dimensions

|   | In            | mm          |
|---|---------------|-------------|
| L | 0.079 ± 0.006 | 2.00 ± 0.15 |
| W | 0.049 ± 0.004 | 1.25 ± 0.10 |
| T | 0.026 max.    | 0.65 max.   |
| a | 0.037 ± 0.004 | 0.95 ± 0.10 |
| b | 0.011 ± 0.004 | 0.28 ± 0.10 |
| c | 0.024 ± 0.004 | 0.60 ± 0.10 |
| d | 0.010 ± 0.002 | 0.25 ± 0.05 |



## Terminal Configuration

| No. | Function |
|-----|----------|
| 1   | INPUT    |
| 2   | GND      |
| 3   | OUTPUT   |



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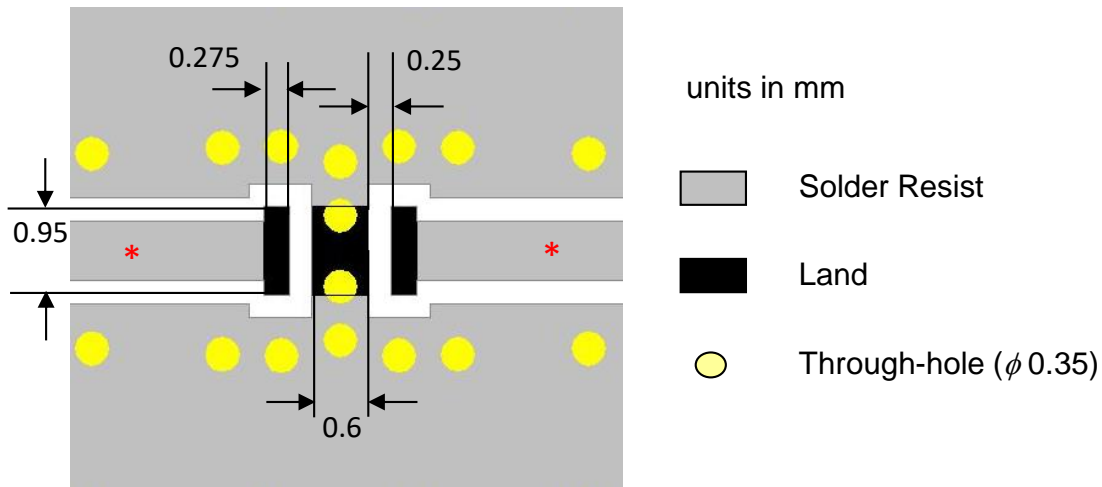
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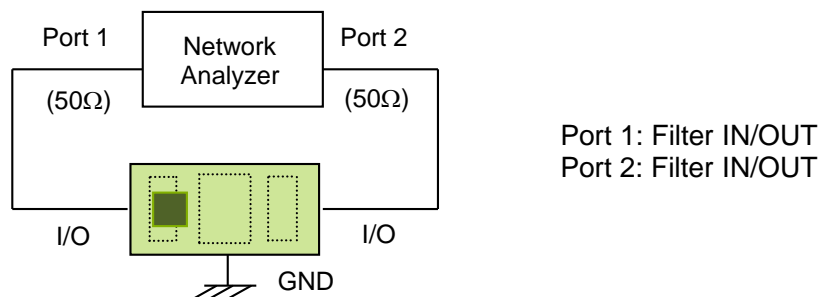
## Mounting Pad Dimensions



\* 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



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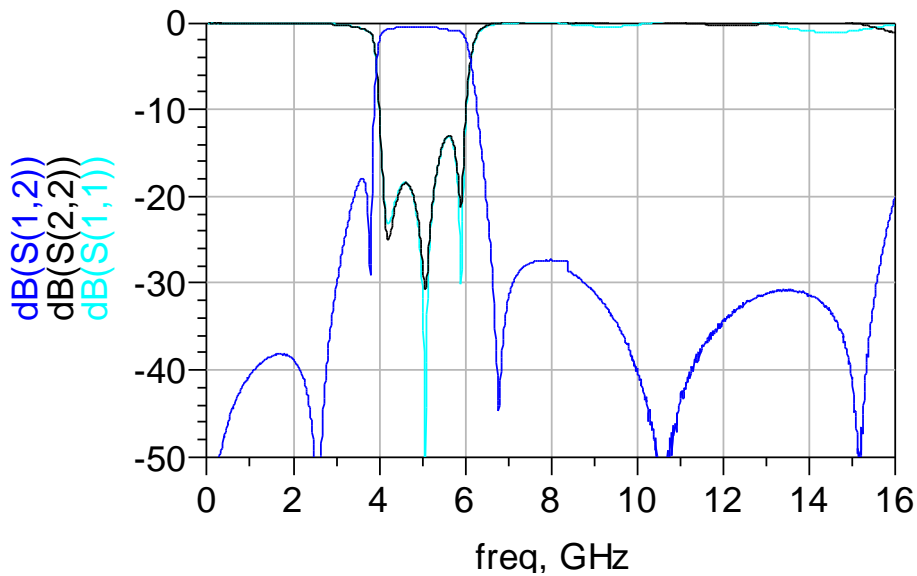
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## Typical Electrical Characteristics (T=25°C)

### 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/technical-notes/rohs-compliance>

## Antenna layout and tuning techniques

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

## Antenna layout review, tuning, and characterization services

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

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