

# High Frequency Ceramic Solutions

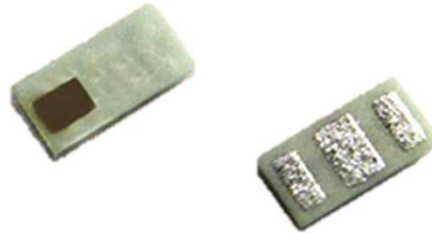
5GHz EIA 0603 Low Profile Band Pass Filter

P/N 5550BP14A0800

Detail Specification: 2/27/2020

Page 1 of 4

| General Specifications |                                      |
|------------------------|--------------------------------------|
| Part Number            | 5550BP14A0800                        |
| Frequency (MHz)        | 5150 - 5950                          |
| Insertion Loss (dB)    | 0.7 typ.@25°C<br>0.9 max.@-40C~ 85°C |
| Return Loss (dB)       | 12 min.                              |
| Power Capacity (W)     | 3 max. (CW)                          |



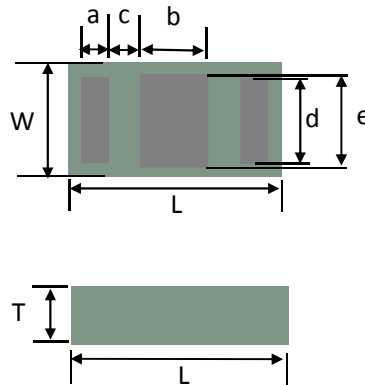
| Attenuation (dB)  |        | Reel Quantity   | 4,000 pcs                                       |
|-------------------|--------|---|---|
| 700 - 2690 MHz    | 35min. | Operating Temperature                                   | -40 to +85°C                                    |
| 3400 - 3800 MHz   | 30min. | Recommended Storage Conditions of unused product on T&R | +5 to +35°C, 18 mos. max.<br>Humidity 45~75% RH |
| 7250 - 7800 MHz   | 12min. |   |   |
| 10300 - 11700 MHz | 20min. |   |   |

## Part Number Explanation

| P/N Suffix | Packing Style     | Bulk   | Suffix = S    | Eg. 5550BP14A0800S         |
|------------|-------------------|--|---------------|----------------------------|
|            |                   | T & R  | Suffix = T    | Eg. 5550BP14A0800T         |
|            | Termination style | 100% Tin                                       | Suffix = None | Eg. 5550BP14A0800 (T or S) |
|            | Evaluation Board  | 5550BP14A0800-EB1SMA (2 female SMA connectors) |               |                            |

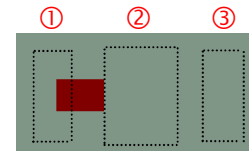
## Mechanical Dimensions

|   | In            | mm          |
|---|---------------|-------------|
| L | 0.063 ± 0.006 | 1.60 ± 0.15 |
| W | 0.031 ± 0.006 | 0.80 ± 0.15 |
| T | 0.024 max.    | 0.6max.     |
| a | 0.010 ± 0.004 | 0.25 ± 0.10 |
| b | 0.016 ± 0.004 | 0.40 ± 0.10 |
| c | 0.009 ± 0.002 | 0.23 ± 0.05 |
| d | 0.022 ± 0.004 | 0.55 ± 0.10 |
| e | 0.024 ± 0.004 | 0.60 ± 0.10 |



## Terminal Configuration

| No. | Function |
|-----|----------|
| 1   | I/O      |
| 2   | GND      |
| 3   | I/O      |



Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



<https://www.johansontechnology.com>

4001 Calle Tecate • Camarillo, CA 93012, USA • TEL +1.805.389.1166

Ver 2.0

2020 Johanson Technology, Inc. All Rights Reserved

# High Frequency Ceramic Solutions

5GHz EIA 0603 Low Profile Band Pass Filter

P/N 5550BP14A0800

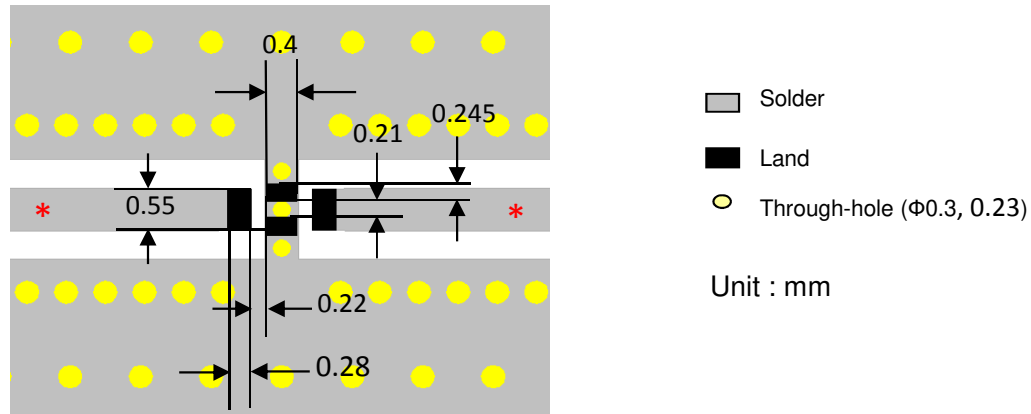
Detail Specification: 2/27/2020

Page 2 of 4

## Mounting Considerations

Mount these devices with colored mark facing up.

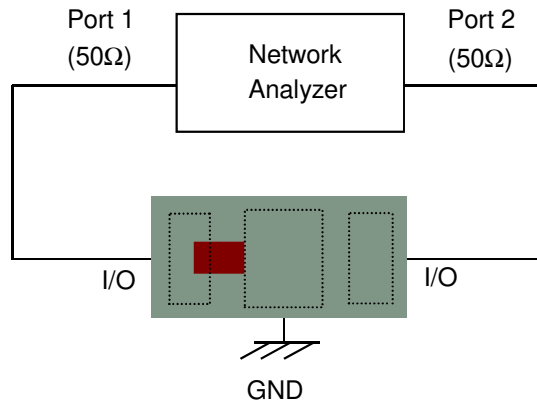
\* Line width should be designed to provide 50ohm impedance matching characteristics.



Need our help laying this out for you? Need the layout file? Send us a message at:

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

## Measuring Diagram



Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



<https://www.johansontechnology.com>

4001 Calle Tecate • Camarillo, CA 93012, USA • TEL +1.805.389.1166

Ver 2.0

2020 Johanson Technology, Inc. All Rights Reserved

# High Frequency Ceramic Solutions

5GHz EIA 0603 Low Profile Band Pass Filter

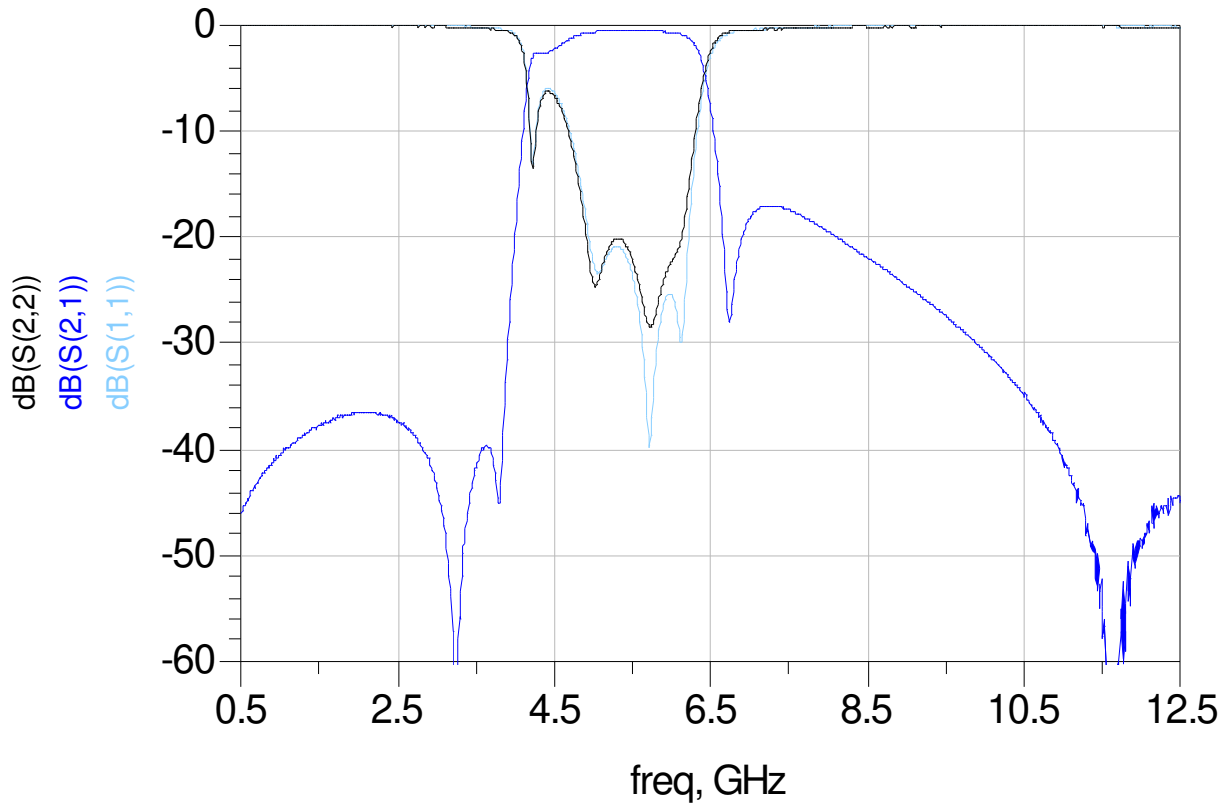
P/N 5550BP14A0800

Detail Specification: 2/27/2020

Page 3 of 4

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

### Insertion and Return Loss



Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



<https://www.johansontechnology.com>

4001 Calle Tecate • Camarillo, CA 93012, USA • TEL +1.805.389.1166

Ver 2.0

2020 Johanson Technology, Inc. All Rights Reserved

# High Frequency Ceramic Solutions

**5GHz EIA 0603 Low Profile Band Pass Filter**

**P/N 5550BP14A0800**

Detail Specification: 2/27/2020

Page 4 of 4

## 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>

## P/N Explanation and Breakdown

<https://www.johansontechnology.com/ipc-pn-explained>

Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



<https://www.johansontechnology.com>

4001 Calle Tecate • Camarillo, CA 93012, USA • TEL +1.805.389.1166

Ver 2.0

2020 Johanson Technology, Inc. All Rights Reserved