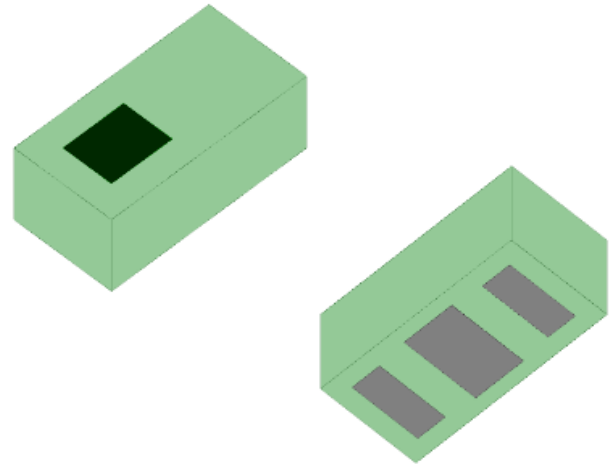


## 5.5 GHz Band Pass Filter

- 5150 - 5950 MHz passband
- Fit for mobile communication systems
- Low insertion loss
- High out-of-band rejection
- SMD, EIA 0603
- RoHS complaint



### General Specifications<sup>1 2</sup>

Insertion Loss (dB)	5150 - 5950 MHz	0.8 Max. (-40 to +85 °C) 1.0 Max. (+85 to +105 °C)
Return Loss (dB)	5150 - 5950 MHz	13 Min.
Attenuation (dB)	700 - 2690 MHz	40 Min.
	3400 - 3800 MHz	45 Min.
	6900 MHz	20 Min.
	7250 - 7800 MHz	20 Min.
	10300 - 11700 MHz	20 Min.

### Maximum Ratings

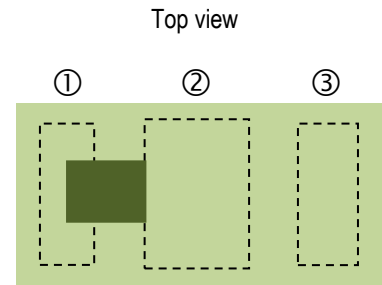
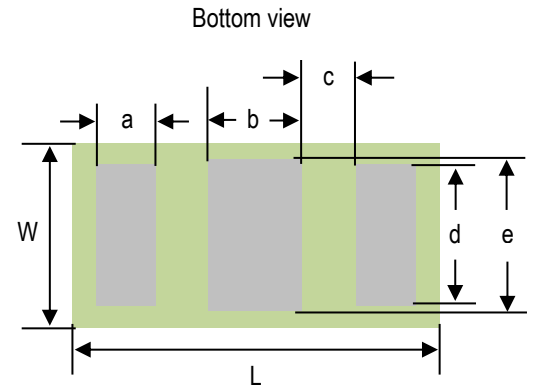
Power Capacity (W)	3 Max. (CW)
Operating Temperature (°C)	-40 to +105
Recommended Storage Conditions post-installation (°C)	-40 to +105
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

<sup>1</sup> Typical value represents average measurement at 25°C. Min./Max. values represent measurements over specified operating temperature.

<sup>2</sup> General specifications measured on Johanson's evaluation board P/N 5550BP14D0800001CE1.

**Mechanical Dimensions**

	Inches			Millimeters		
<b>L</b>	0.063	±	0.006	1.60	±	0.15
<b>W</b>	0.031	±	0.006	0.80	±	0.15
<b>T</b>	0.024		Max.	0.60		Max.
<b>a</b>	0.010	±	0.004	0.25	±	0.10
<b>b</b>	0.016	±	0.004	0.40	±	0.10
<b>c</b>	0.009	±	0.002	0.23	±	0.05
<b>d</b>	0.022	±	0.004	0.55	±	0.10
<b>e</b>	0.024	±	0.004	0.60	±	0.10



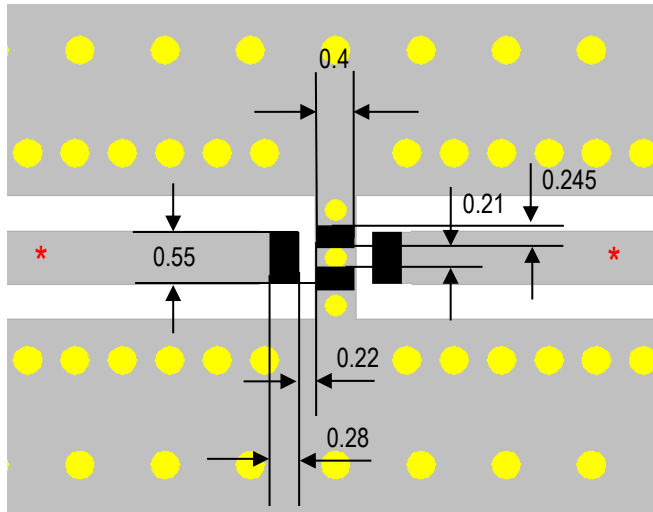
**Terminal Configuration<sup>3</sup>**

Pin Number	Function
1	INPUT/OUTPUT
2	GND
3	INPUT/OUTPUT




<sup>3</sup> The termination type is Nickel Tin. Go to <https://www.johansontechnology.com/ipcsoldering-profile> for Typical Soldering Profile.

**Recommended PCB Layout**

Note: Mount device with colored mark facing up.



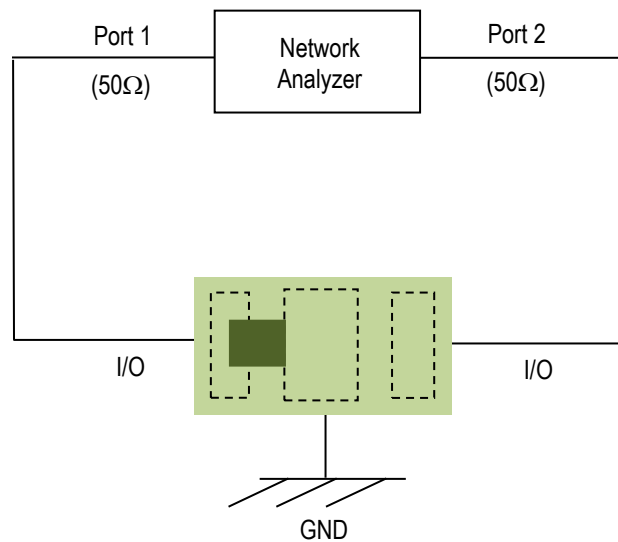
Units in mm

-  Solder Resist
-  Land
-  Through-hole ( $\phi$  0.3, 0.23)

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

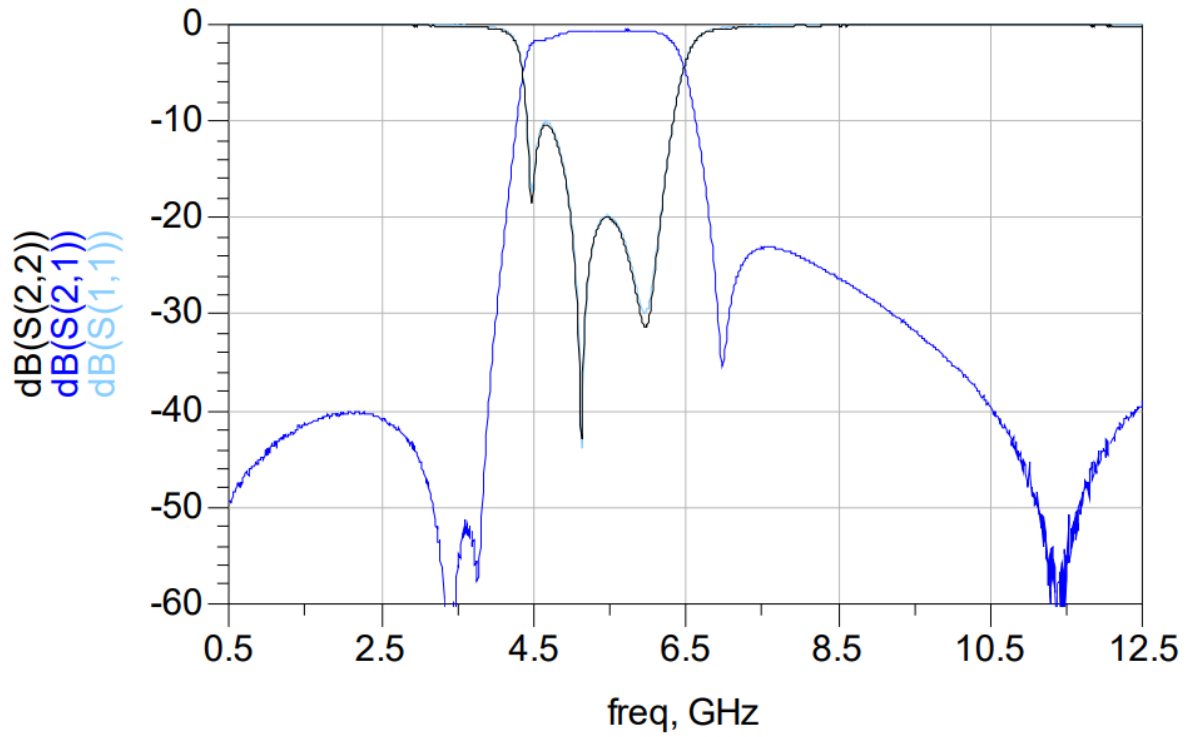
If you'd like the CAD PCB layout or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

**Measuring Diagram**



**RF Measurement (T = 25°C)**

**Insertion Loss, Return Loss and Attenuation**

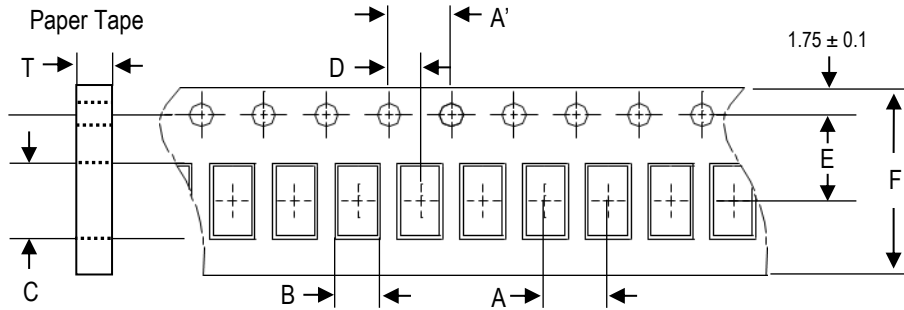


S-parameters, layout file, and complimentary design review are available upon request. Contact our application engineers at:

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

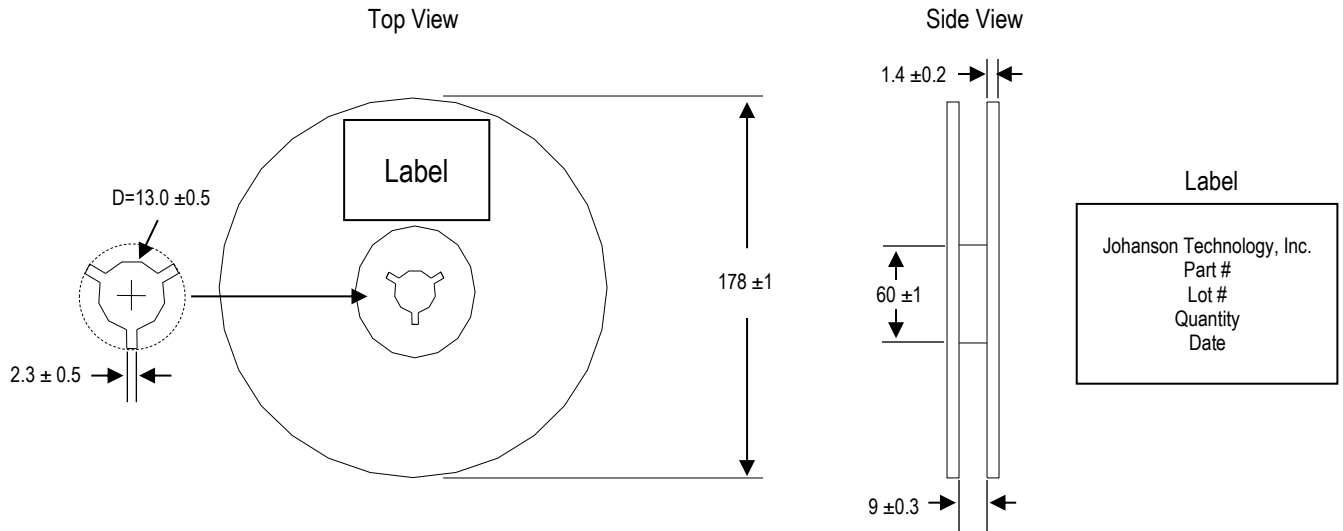
**Tape and Reel Specification (Units in mm)**

**Tape Dimensions**

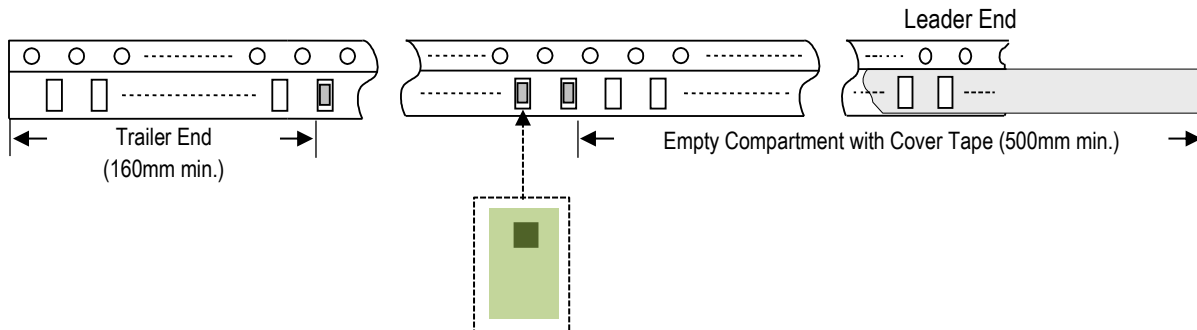


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ±0.1	4.0 ±0.1	1.1 ±0.1	1.92 ±0.1	2.0 ±0.1	3.5 ±0.1	8.0 ±0.1	0.75 ±0.05	4,000 pcs.	Paper

**Reel Dimensions**



**Leader and Trailer Dimensions**



**Orderable Part Number**

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	5550BP14D0800001B	Nickel Tin
T & R (7" Reel Paper Tape)	5550BP14D0800001T (Qty: 4,000 pcs./reel)	
Evaluation Board with 2 SMA Connectors	5550BP14D0800001CE1	

**Important Links**

[5550BP14D0800001T Product Page](#)

[More Band Pass Filters](#)

[Antenna Tuning, Optimization, and Validation Services](#)

[Soldering Information](#)

[MSL Information](#)

[Packaging Information](#)

[Recommended Storage Condition and Max Shelf Life](#)

[RoHS Compliance](#)

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