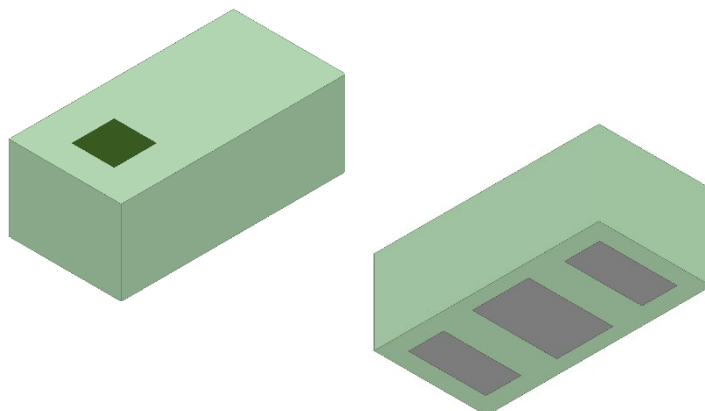


## 5150 – 5950MHz Band Pass Filter

- Applications include WiFi, U-NII 1-4
- Low insertion loss
- Operating temperature up to 105°C (non-automotive)
- SMD, EIA 0603



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

Passband Frequency (MHz)	5150 – 5950
Insertion Loss (dB)	0.5 Typ. 0.6 Max. @85°C 0.8 Max. @105°C
Return Loss (dB)	15 Typ. (13 Min.)
Attenuation	
Frequency Range (MHz) Attenuation (dB)	2400 – 2500 35 Min.
Frequency Range (MHz) Attenuation (dB)	10300 – 11900 30 Min.
Frequency Range (MHz) Attenuation (dB)	15450 – 17850 25 Min.

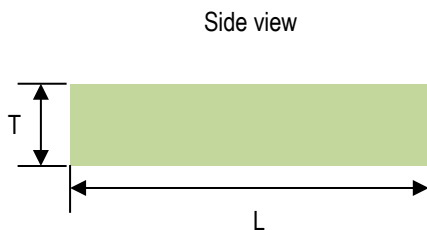
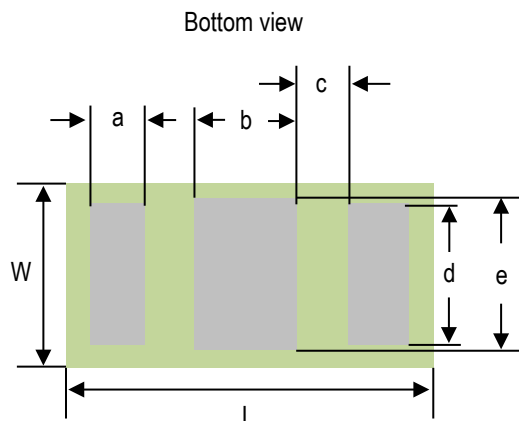
### Maximum Ratings

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 from -40°C to +105°C

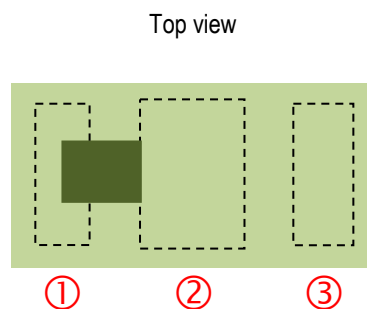
**Mechanical Dimensions**

	Inches			Millimeters		
<b>L</b>	0.063	±	0.006	1.6	±	0.15
<b>W</b>	0.031	±	0.006	0.8	±	0.15
<b>T</b>	0.024	±	max	0.6	±	0.1
<b>a</b>	0.010	±	0.004	0.25	±	0.1
<b>b</b>	0.016	±	0.004	0.4	±	0.1
<b>c</b>	0.009	±	0.002	0.23	±	0.05
<b>d</b>	0.022	±	0.004	0.55	±	0.1
<b>e</b>	0.024	±	0.004	0.6	±	0.1

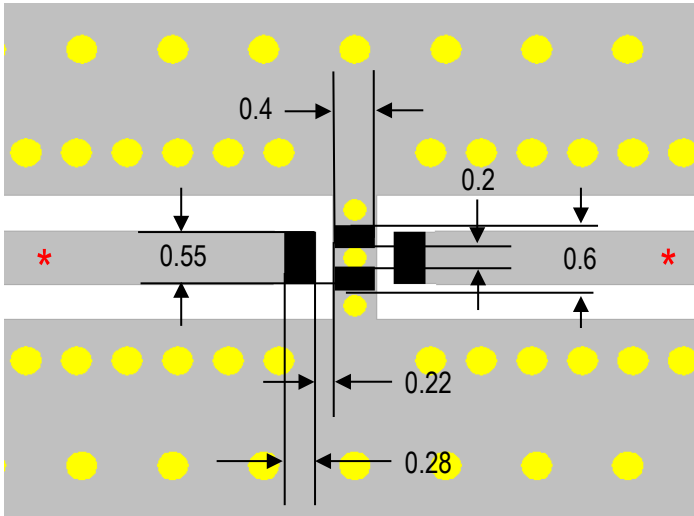


**Terminal Configuration**




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



**PCB Layout**



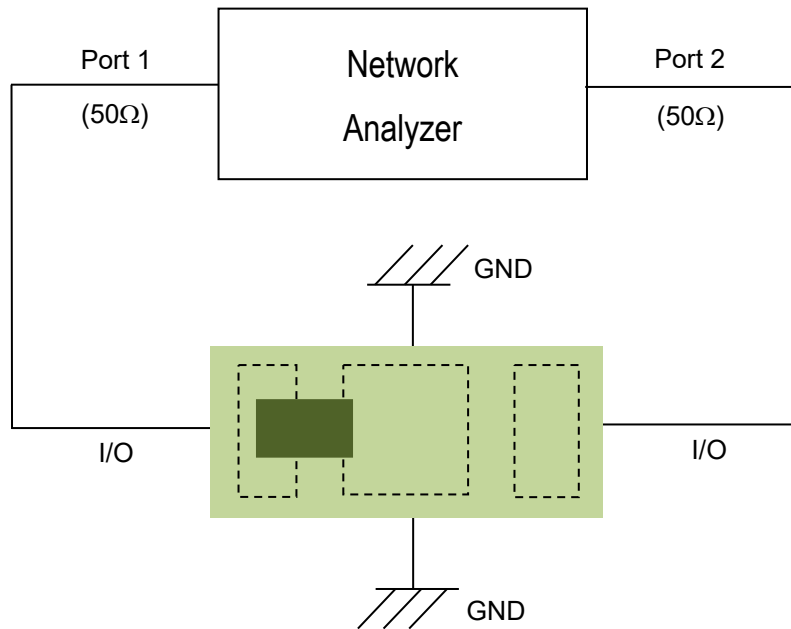
Units in mm

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

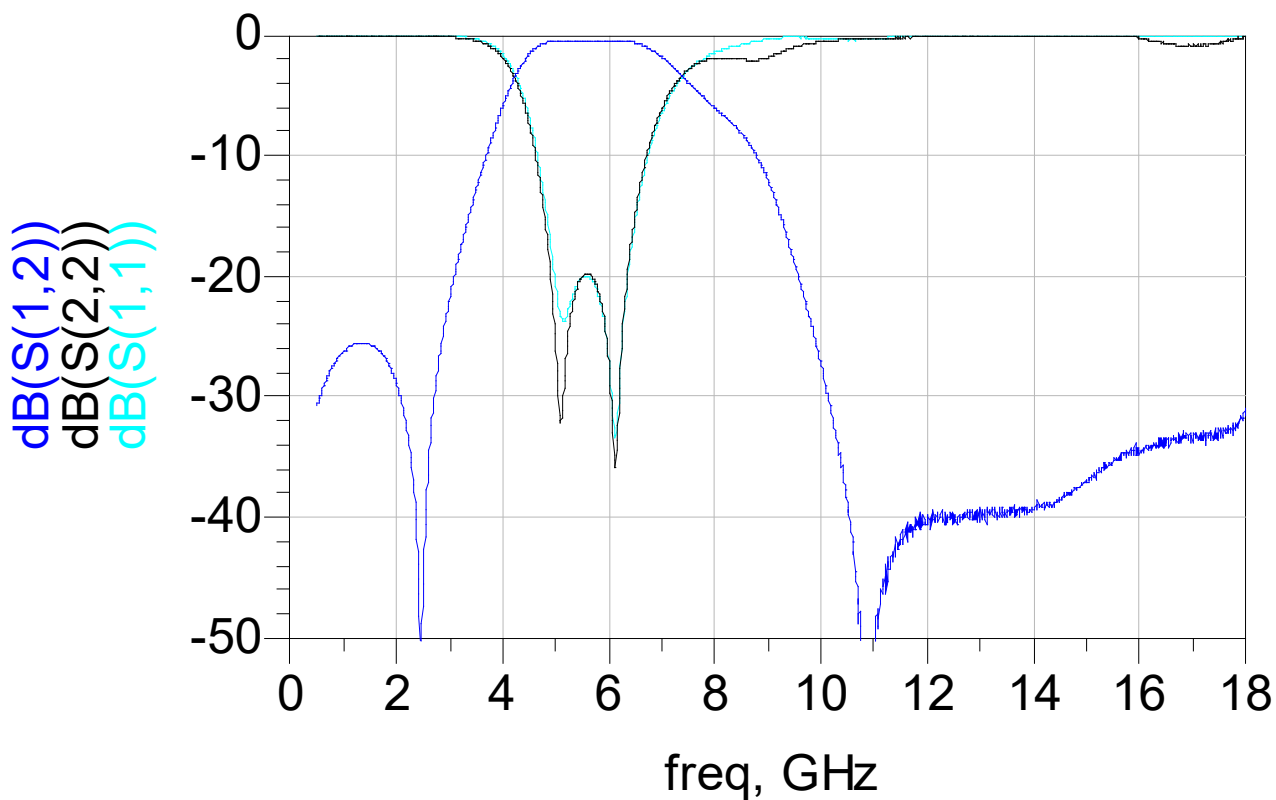
\* Transmission line width should be designed to match 50 $\Omega$  characteristic impedance, depending on PCB material and thickness.

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**



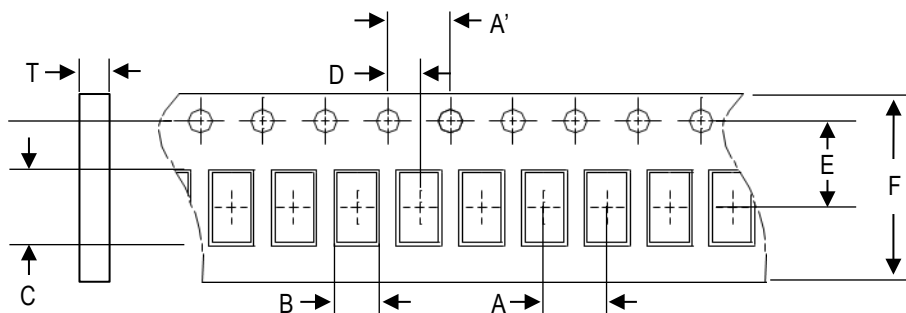
**RF Measurement**



S-parameter and layout file available upon request. Please contact <https://www.johansontechnology.com/ask-a-question>

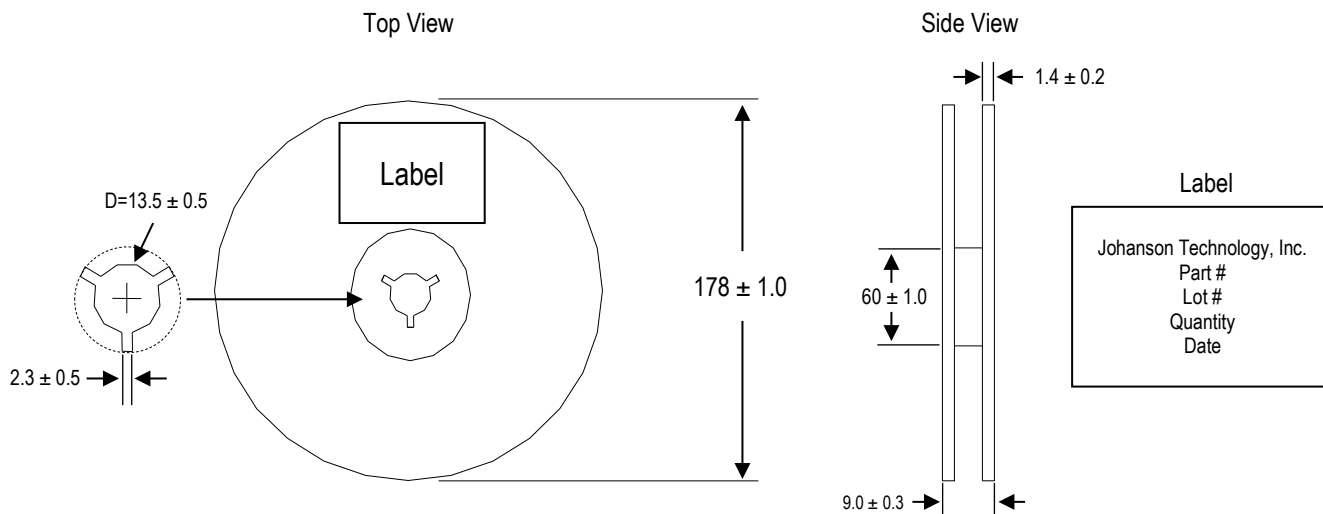
**Tape and Reel Specification (Units in mm)**

Tape Dimensions

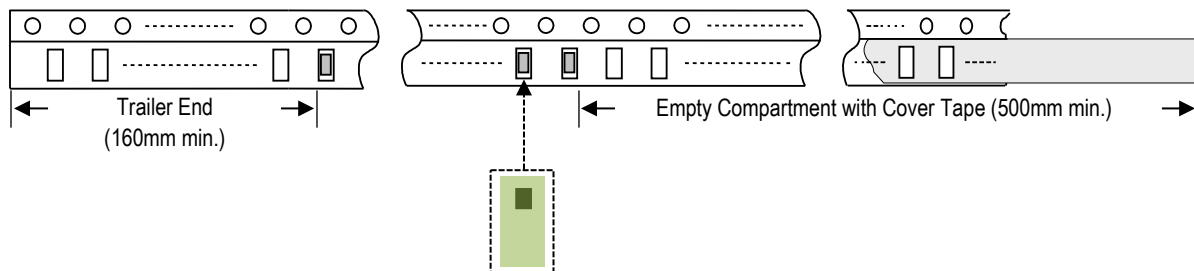


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0±0.1	4.0±0.1	1.10±0.1	1.92±0.1	2.0±0.1	3.5±0.1	8.0±0.1	0.75±0.05	4,000pcs	Paper

Reel Dimensions



Leader and Trailer Dimensions



**Orderable Part Number**

Packaging Style	Part Number
Bulk (loose pcs.)	5550BP14E0800001S
T & R (7" Reel Paper Tape)	5550BP14E0800001T (Qty: 4,000 pcs./reel)
Evaluation Board with SMA Connector	5550BP14E0800001CE1

**Important Links**

[More Band Pass Filters](#)

[Ceramic Chip Antennas](#)

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

[Soldering Information](#)

[MSL Information](#)

[Packaging Information](#)

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

[RoHS Compliance](#)