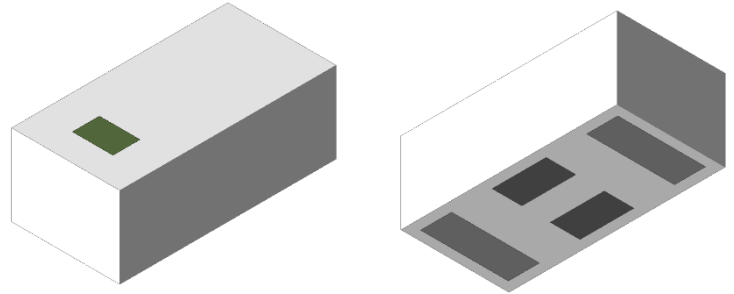


## UWB CH 9 Band Pass Filter

- 7737 - 8237 MHz pass band
- SMD, EIA 0603 case size (1.6 x 0.8 x 0.6 mm)
- 3W Max. power rating
- RoHS compliant



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

Insertion Loss (dB)	7737 - 8237 MHz	1.65 Max.
Return Loss (dB)	7737 - 8237 MHz	12 Min.
Group Delay Ripple (ps)	7737 - 8237 MHz	300 Max.
Attenuation (dB)	1710 - 2170 MHz	30 Min.
	2300 - 2400 MHz	30 Min.
	2496 - 2690 MHz	27 Min.
	3400 - 3800 MHz	27 Min.
	5150 - 5925 MHz	26 Min.
	5925 - 6875 MHz	30 Min.
	6875 - 7000 MHz	30 Min.
	7000 - 7115 MHz	20 Min.
	7115 - 7125 MHz	20 Min.
	15474 - 16474 MHz	25 Min.

### Maximum Ratings

Power Capacity (W)	3 Max. (CW)
Operating Temperature (°C)	-40 to +85
Recommended Storage Conditions post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

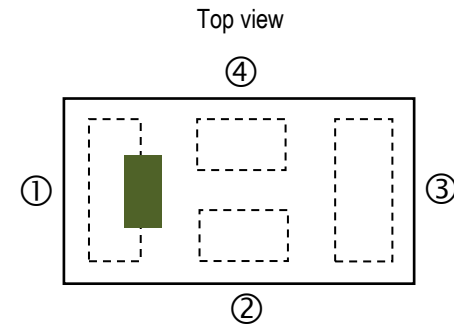
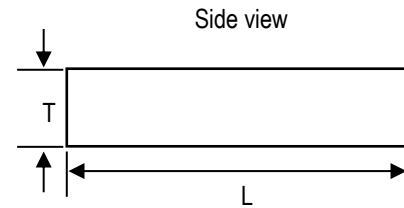
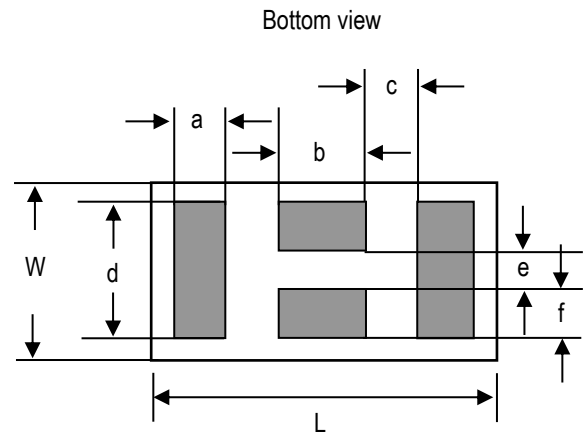
<sup>1</sup> Typical value represents average measurement at 25°C. Min./Max. values represent measurements over specified operating temperature.

<sup>2</sup> General specifications measured on Johanson's evaluation board P/N 8000BP14A0500001CE1.



**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	±	0.004	0.60	±	0.10
<b>a</b>	0.009	±	0.002	0.23	±	0.05
<b>b</b>	0.016	±	0.004	0.40	±	0.10
<b>c</b>	0.012	±	0.004	0.30	±	0.10
<b>d</b>	0.026	±	0.004	0.65	±	0.10
<b>e</b>	0.008	±	0.002	0.21	±	0.05
<b>f</b>	0.009	±	0.002	0.22	±	0.05



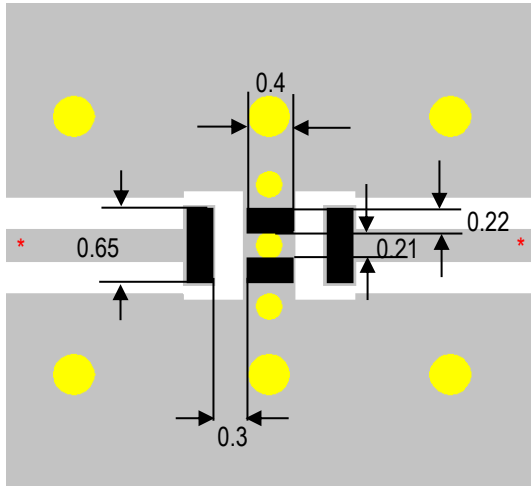
**Terminal Configuration<sup>3</sup>**

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




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

**Recommended Mounting Configuration**

Note: Mount device with colored mark facing up.



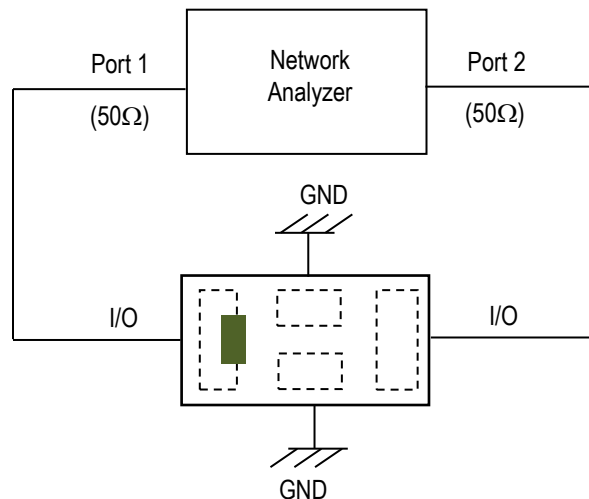
Units in mm

-  Solder Resist
-  Land
-  Through-hole ( $\phi 0.23$ ,  $\phi 0.36$ )

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

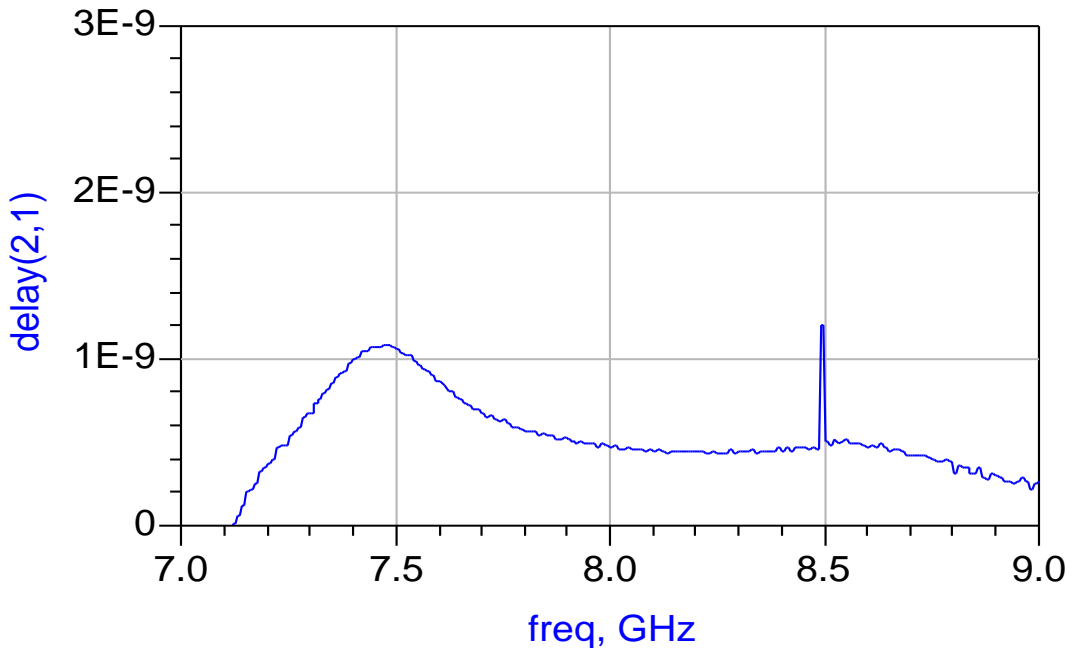
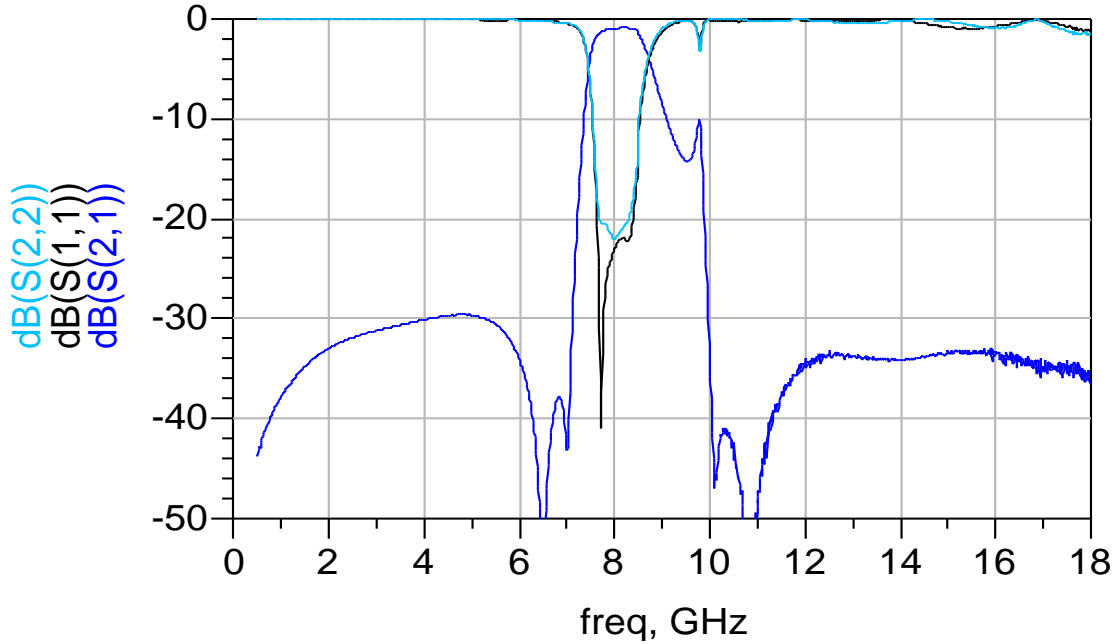
If you'd like the CAD PCB layout or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

**Measuring Diagram**



**RF Measurement (T = 25°C)**

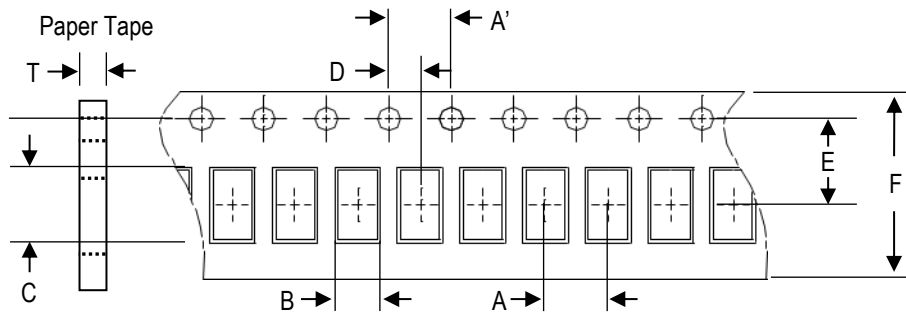
Insertion Loss, Return Loss, Group Delay



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

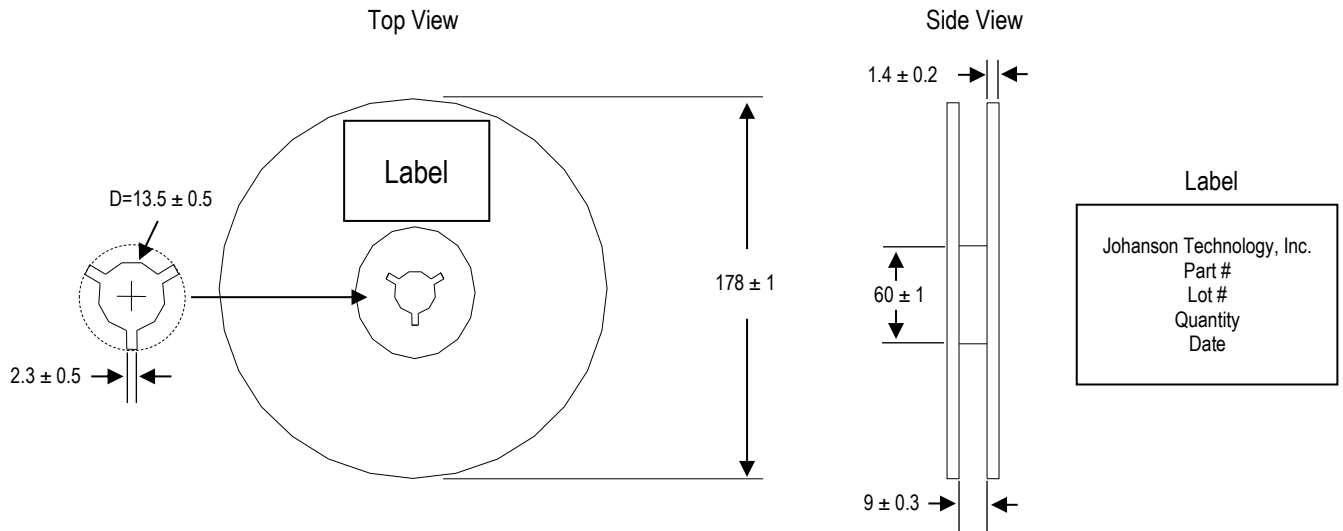
**Tape and Reel Specification (Units in mm)**

**Tape Dimensions**

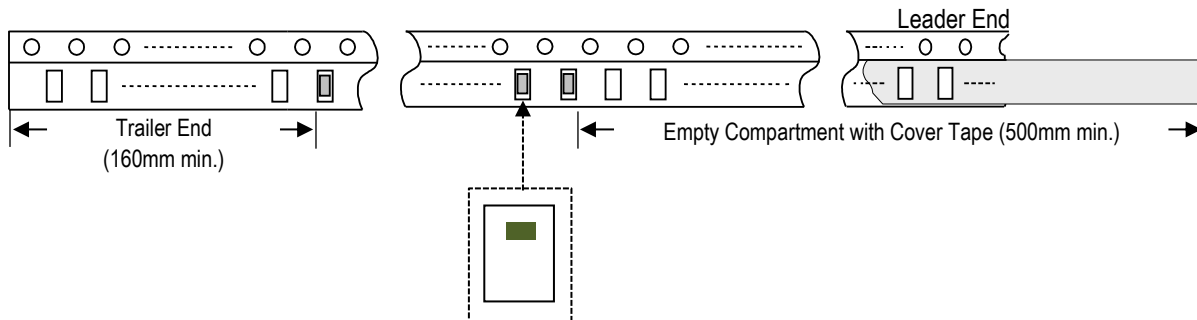


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0±0.1	4.0±0.1	1.1±0.1	1.92±0.1	2.0±0.1	3.5±0.1	8.0±0.1	0.75±0.05	4,000pcs.	Paper

**Reel Dimensions**



**Leader and Trailer Dimensions**



**Ordering Information**

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	8000BP14A0500001B	Nickel Tin
T & R (7" Reel Paper Tape)	8000BP14A0500001T (Qty: 4,000 pcs/reel)	
Evaluation Board with 2 SMA Connectors	8000BP14A0500001CE1	

**Important Links**

[8000BP14A0500001T 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](#)

*Contact our application engineers for a PCB layout review.*

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