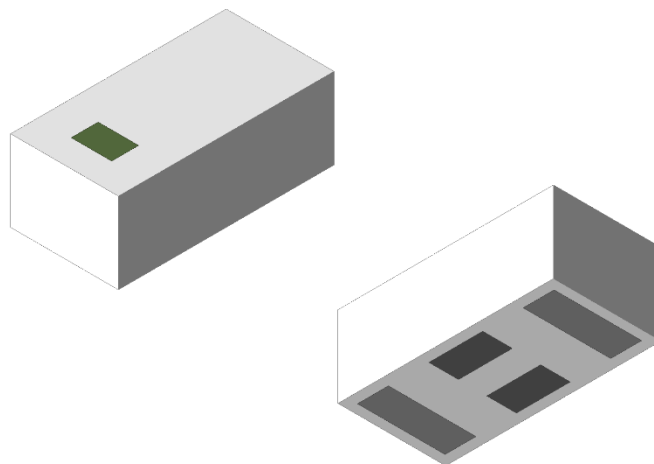




UWB CH 9 Band Pass Filter

- 7737 - 8237 MHz passband
- SMD, EIA 0603
- 1W Max. power rating
- RoHS compliant
- AEC-Q200 Qualified available



General Specifications^{1 2}

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

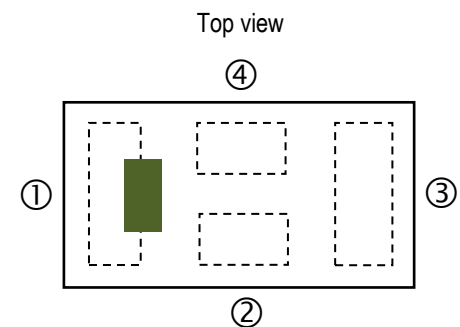
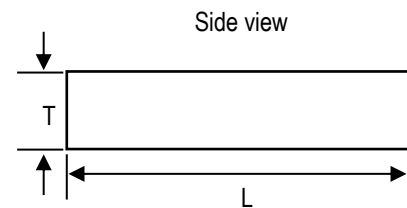
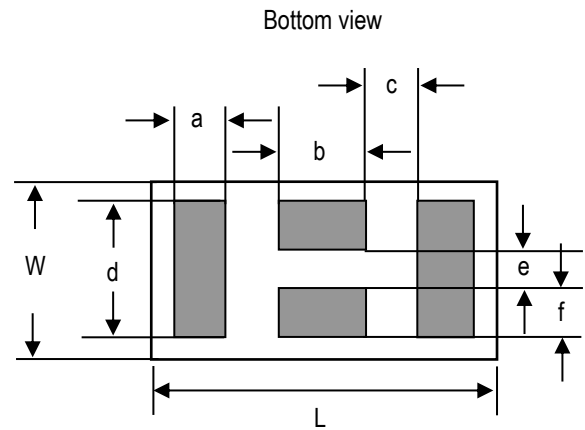
Power Capacity (W)	1 Max. (CW)
Operating Temperature (°C)	-40 to +85
Recommended Storage Conditions post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

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

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

Mechanical Dimensions

	Inches			Millimeters		
L	0.063	±	0.006	1.60	±	0.15
W	0.031	±	0.006	0.80	±	0.15
T	0.024	±	0.004	0.60	±	0.10
a	0.009	±	0.002	0.23	±	0.05
b	0.016	±	0.004	0.40	±	0.10
c	0.012	±	0.004	0.30	±	0.10
d	0.026	±	0.004	0.65	±	0.10
e	0.008	±	0.002	0.21	±	0.05
f	0.009	±	0.002	0.22	±	0.05



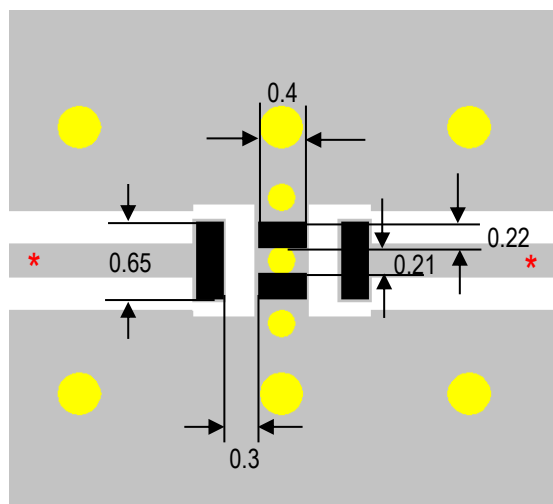
Terminal Configuration³

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

³ 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

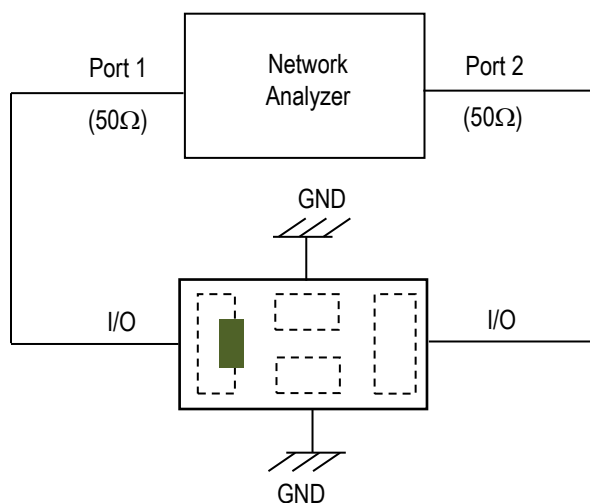


Through-hole ($\phi 0.23$, $\phi 0.36$)

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

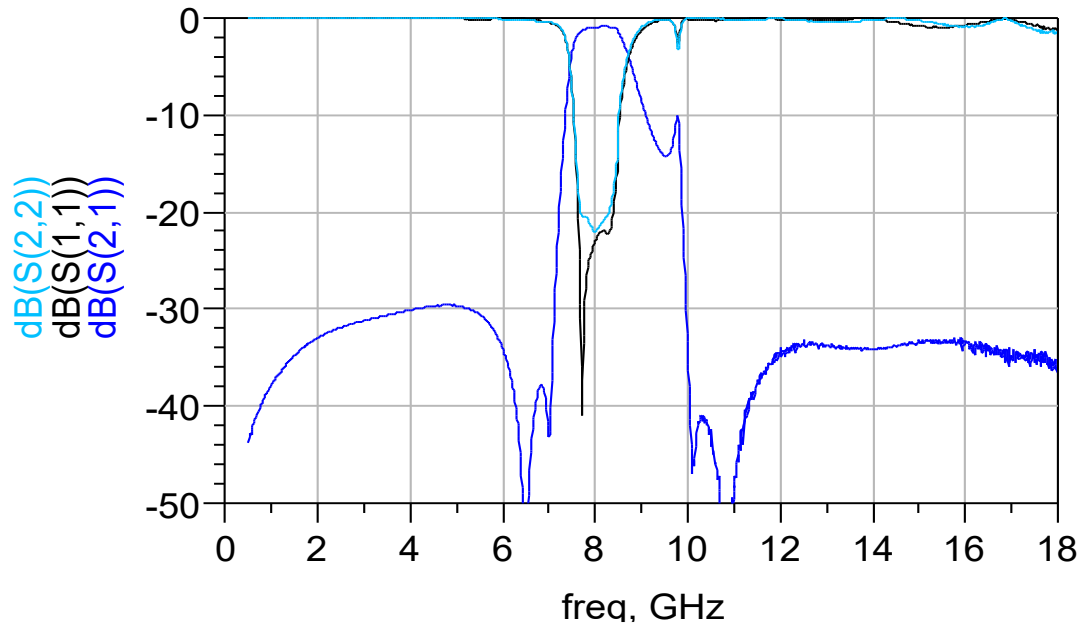
If you'd like the CAD PCB layout or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

Measuring Diagram

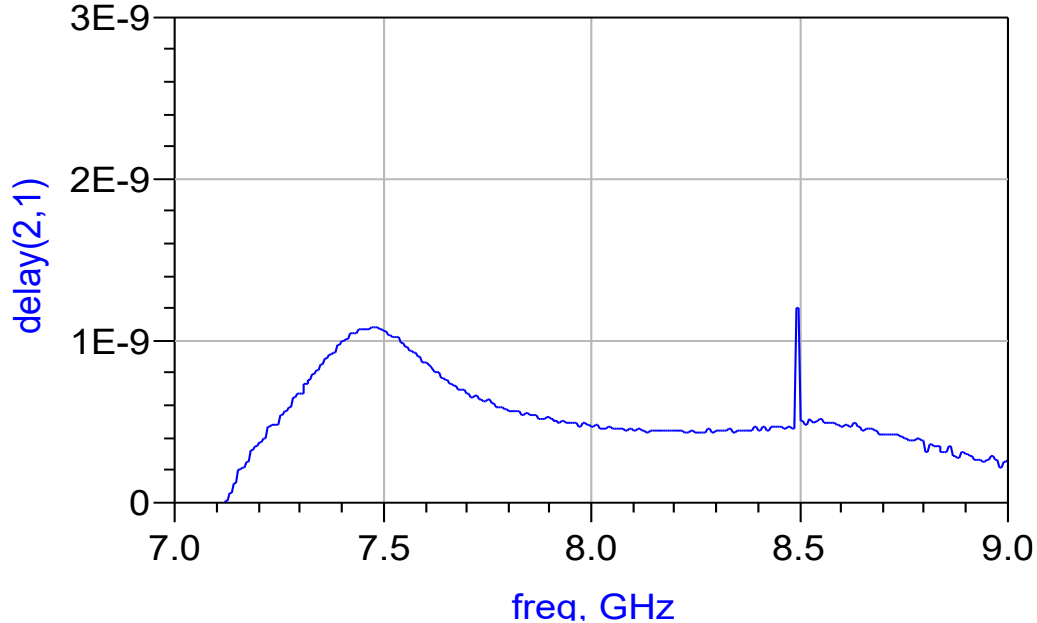


RF Measurement (T = 25°C)

Insertion Loss, Return Loss



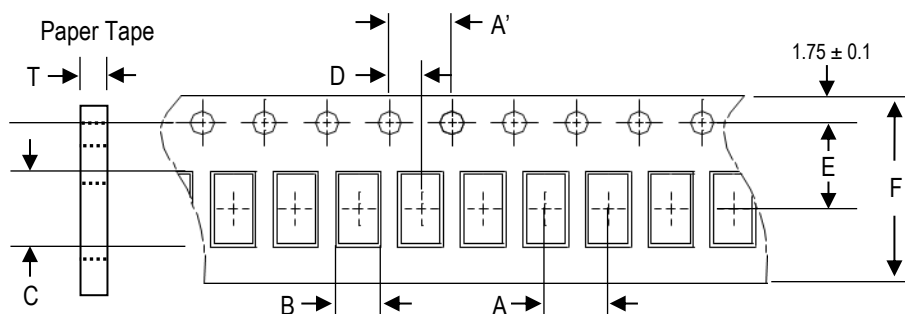
Group Delay



S-parameters, layout file, and complimentary design review are available upon request. Contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

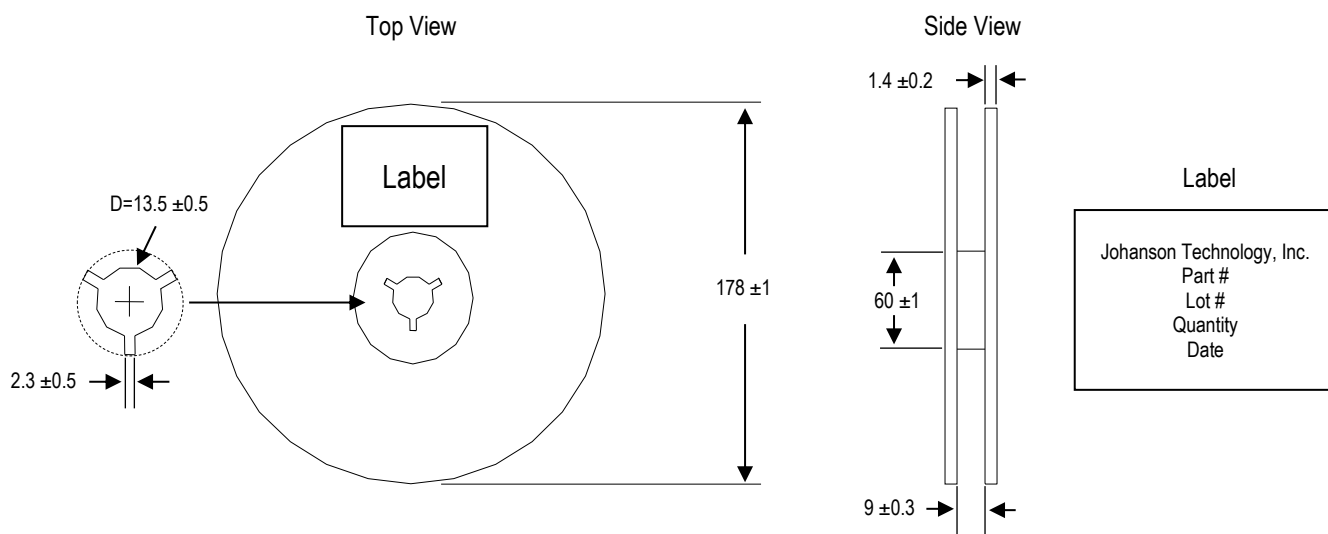
Tape and Reel Specification (Units in mm)

Tape Dimensions

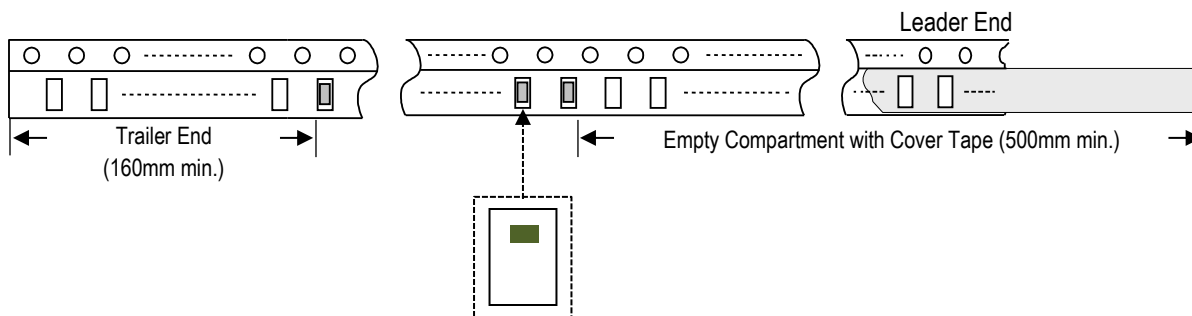


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ± 0.1	4.0 ± 0.1	1.1 ± 0.1	1.92 ± 0.1	2.0 ± 0.1	3.5 ± 0.1	8.0 ± 0.1	0.75 ± 0.05	4,000 pcs.	Paper

Reel Dimensions



Leader and Trailer Dimensions



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](#)

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