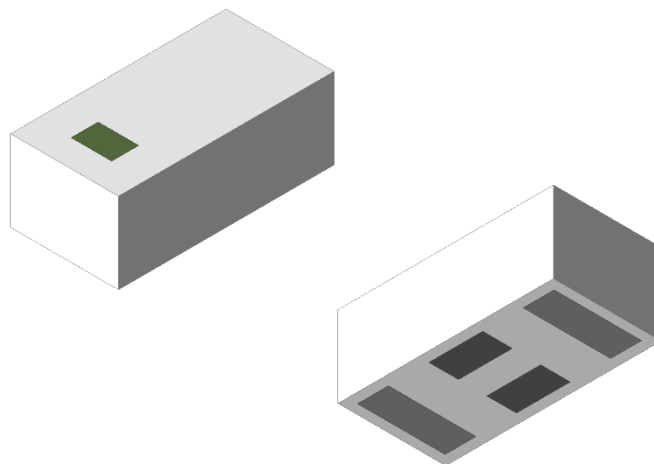




UWB CH 9 Band Pass Filter, AEC-Q200 Qualified

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



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

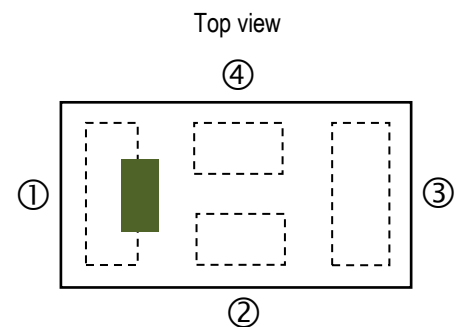
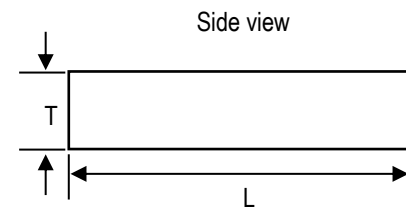
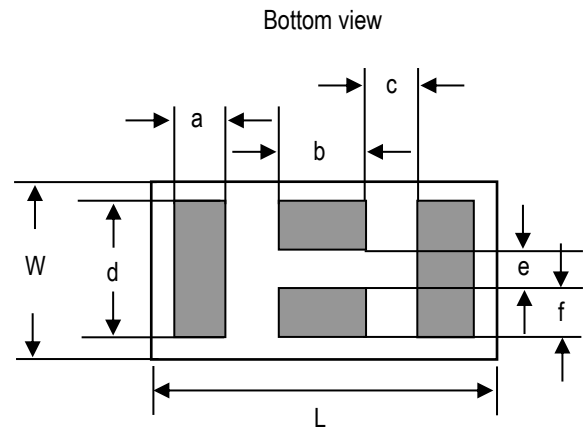
Power Capacity (W)	1 Max. (CW)
Operating Temperature (°C)	-40 to +105
Recommended Storage Conditions post-installation (°C)	-40 to +105
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

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



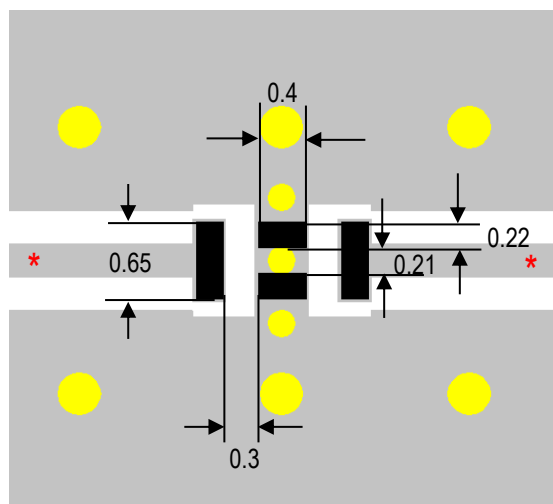
Terminal Configuration³

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

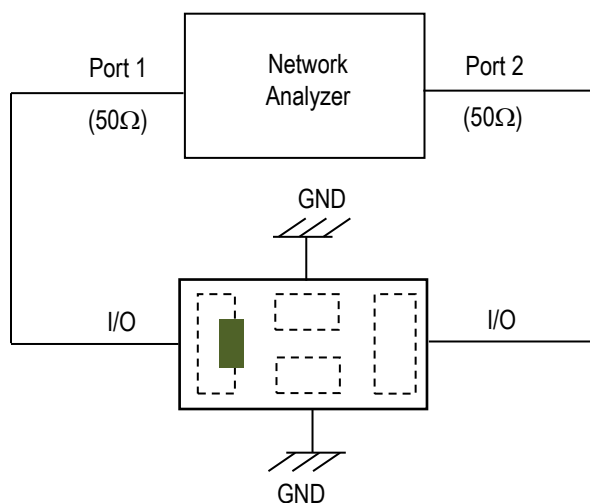


Through-hole (ϕ 0.23, ϕ 0.36)

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

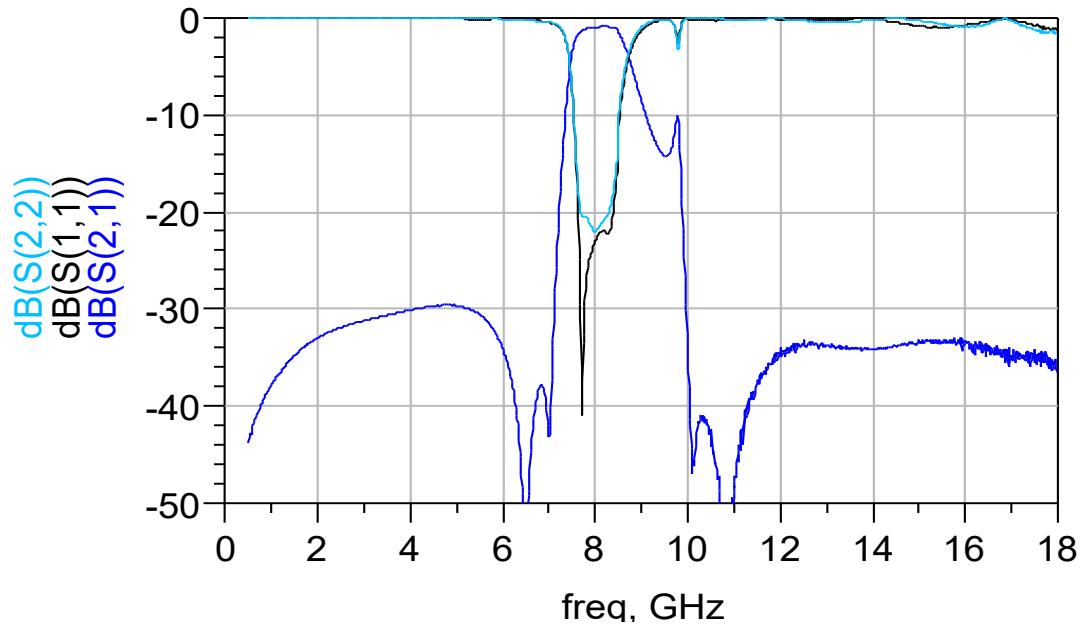
If you'd like the CAD PCB layout or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

Measuring Diagram

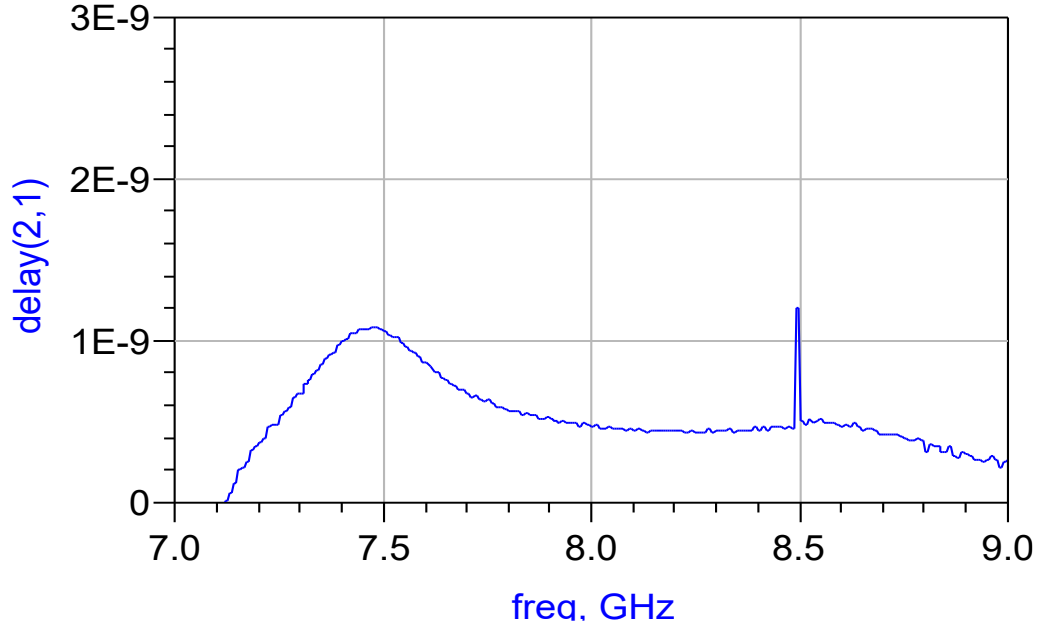


RF Measurement (T = 25°C)

Insertion Loss, Return Loss



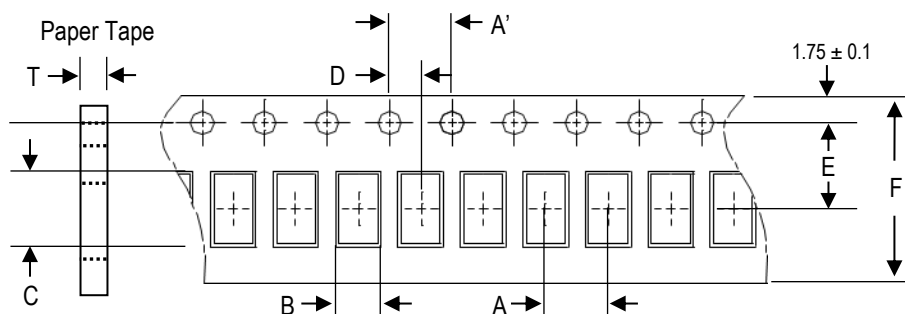
Group Delay



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

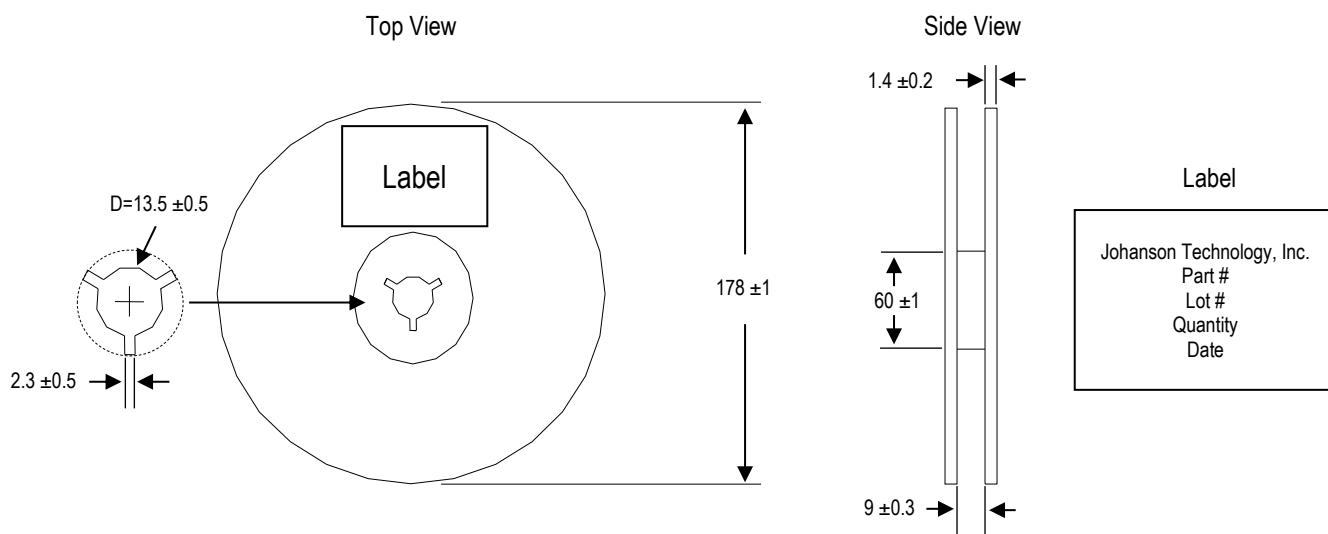
Tape and Reel Specification (Units in mm)

Tape Dimensions

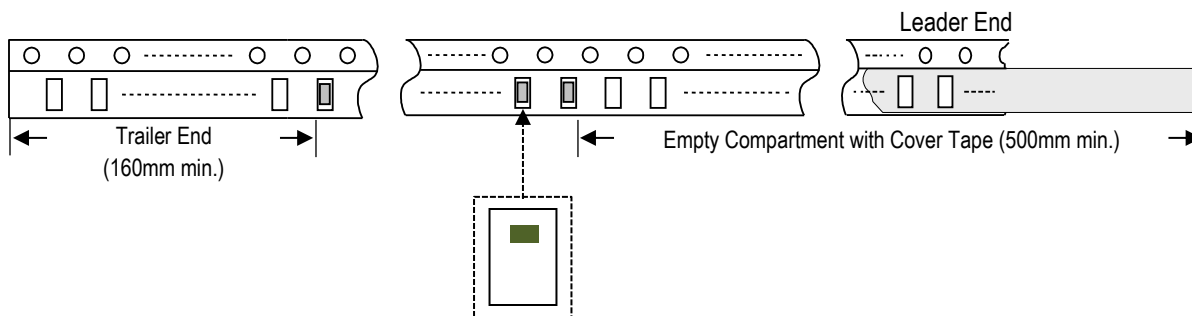


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ± 0.1	4.0 ± 0.1	1.1 ± 0.1	1.92 ± 0.1	2.0 ± 0.1	3.5 ± 0.1	8.0 ± 0.1	0.75 ± 0.05	4,000 pcs.	Paper

Reel Dimensions



Leader and Trailer Dimensions



Ordering Information

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	8000BP14A0500002B	Nickel Tin
T & R (7" Reel Paper Tape)	8000BP14A0500002T (Qty: 4,000 pcs/reel)	
Evaluation Board with 2 SMA Connectors	8000BP14A0500001CE1	

Important Links

[8000BP14A0500002T 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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