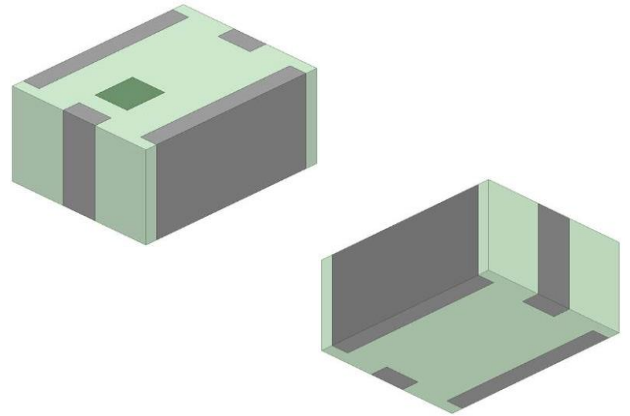


6.6 GHz Band Pass Filter

- 6095 – 7125 MHz passband
- WiFi 6E / WiFi 7 coexistence, UNII 5-8 WLAN
- Low insertion loss
- High out-of-band rejection
- SMD, EIA 1210
- RoHS complaint



General Specifications^{1 2}

Insertion Loss (dB)	6095 – 7125 MHz	1.5 Typ.	2.5 Max.
Insertion Loss Ripple (dB)	6095 – 7125 MHz	1.2 Typ.	2.0 Max.
Return Loss (dB)	6095 – 7125 MHz	12.7 Typ.	9.5 Min.
Attenuation (dB)	2400 – 2500 MHz	36 Typ.	25 Min.
	5170 – 5835 MHz	32 Typ.	30 Min.
	12190 – 14430 MHz	29 Typ.	15 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.

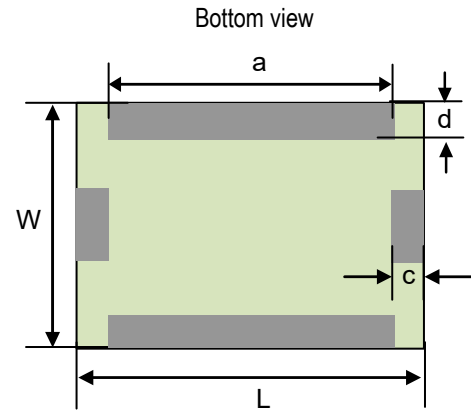
¹ Typical value represents average measurement at 25°C. Min./Max. values represent measurements over specified operating temperature.

² General specifications measured on Johanson's evaluation board PN 6610BP41A1030001CE1.

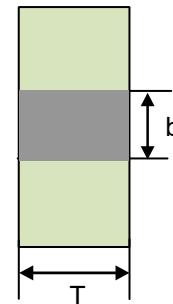


Mechanical Dimensions

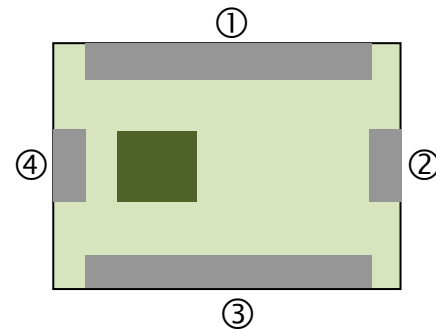
	Inches			Millimeters		
L	0.126	±	0.008	3.20	±	0.20
W	0.098	±	0.008	2.50	±	0.20
T	0.071		Max.	1.80		Max.
a	0.110	±	0.004	2.80	±	0.10
b	0.024	±	0.008	0.60	±	0.20
c	0.012	±	0.006	0.30	±	0.15
d	0.012	±	0.004	0.30	±	0.10



Side view



Top view

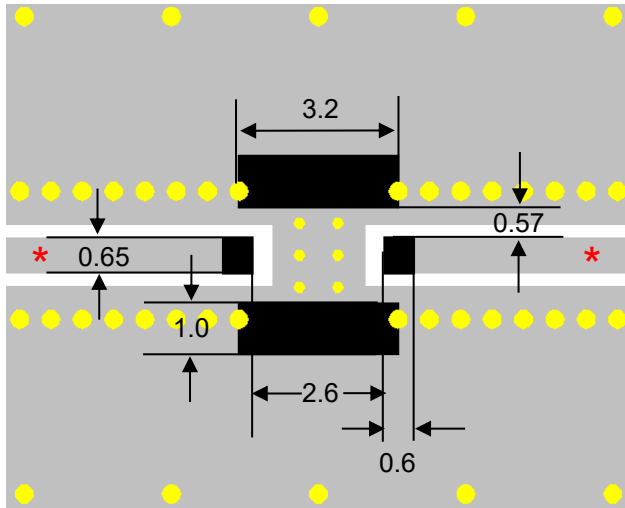


Terminal Configuration³




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

³ The termination type is Nickel Tin. Go to: <https://www.johansontechnology.com/tech-notes/typical-soldering-profile-ipc>. Typical Soldering Profile.

Recommended PCB Layout



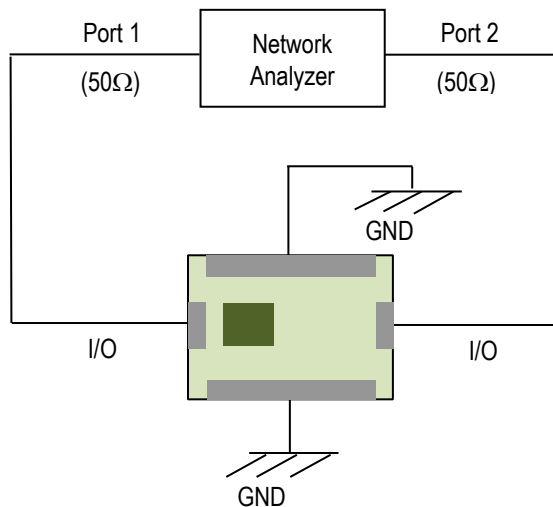
Units in mm

-  Solder Resist
-  Land
-  Through-hole ($\phi 0.35 / \phi 0.2$)

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

If you would like the full reference design package or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

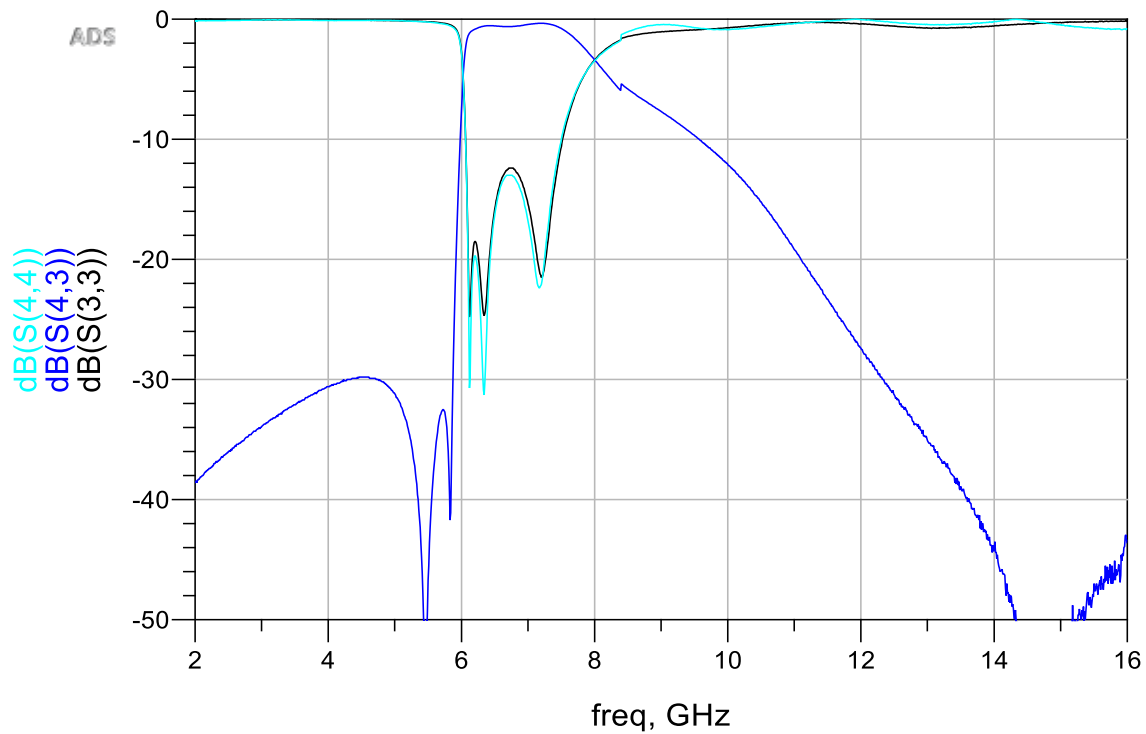
Measuring Diagram





RF Measurements (T = 25°C)

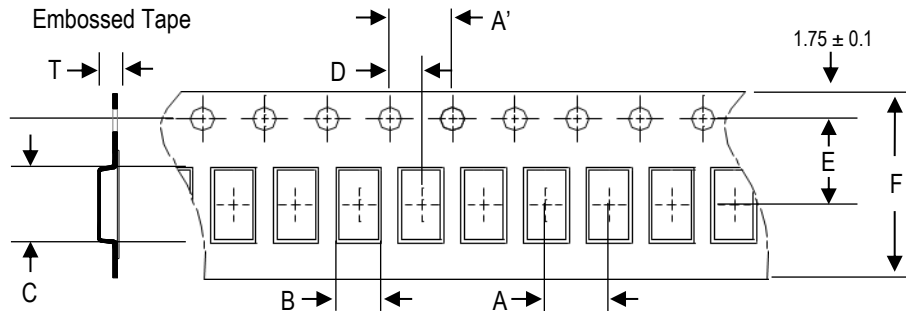
Insertion Loss and Return Loss



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

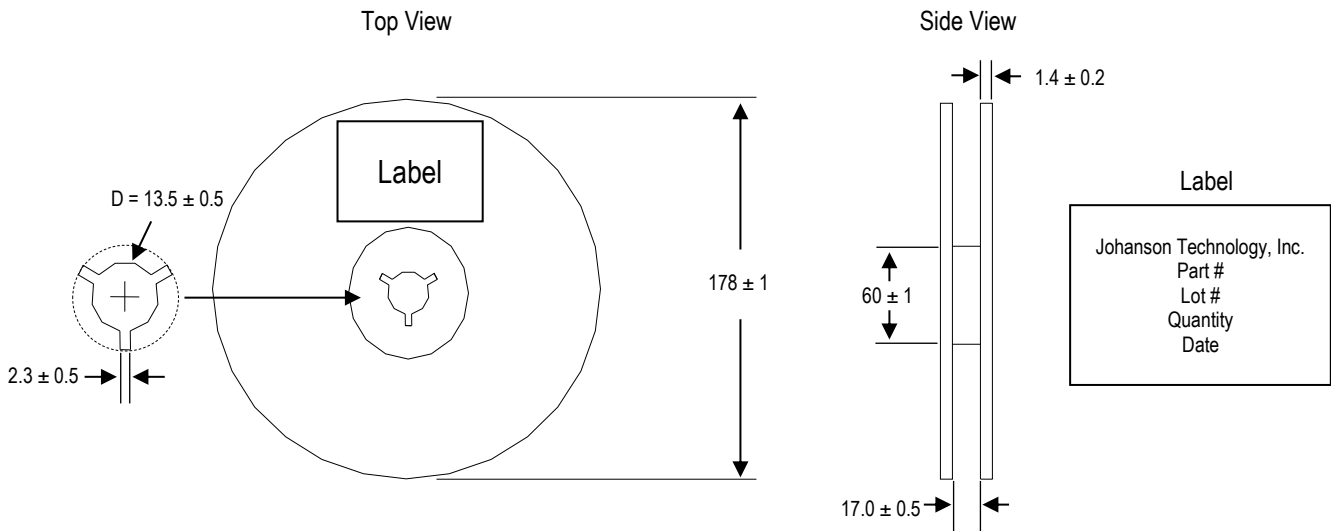
Tape and Reel Specifications (Units in mm)

Tape Dimensions

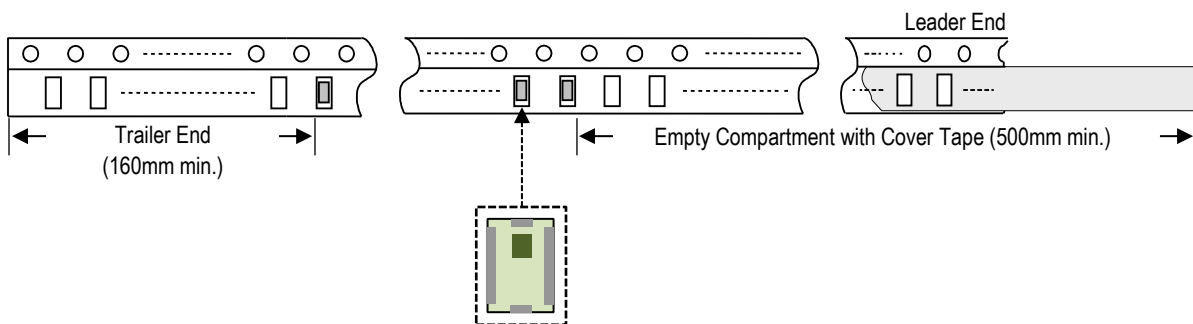


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ± 0.1	4.0 ± 0.1	2.75 ± 0.1	3.45 ± 0.1	2.0 ± 0.1	3.5 ± 0.1	8.0 ± 0.1	1.70 ± 0.1	2,000 pcs	Plastic (Embossed)

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	6610BP41A1030001B	Nickel Tin
T & R (7" Reel Embossed Tape)	6610BP41A1030001E (Qty: 2,000 pcs./reel)	
Evaluation Board with 2 SMA Connector	6610BP41A1030001CE1	

Important Links

[6610BP41A1030001E 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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