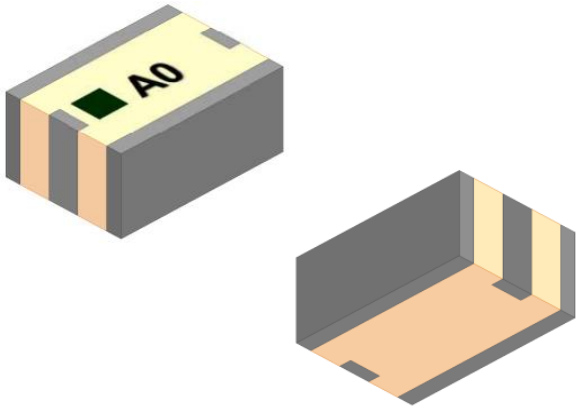
6.6 GHz Band Pass Filter

- 6100 – 7125 MHz passband
- Fit for wireless communication systems: Extended WiFi
- Low insertion loss
- High out-of-band rejection
- SMD, EIA 1812
- RoHS complaint



General Specifications[1] [2]

Insertion Loss (dB)	6100 – 7125 MHz		2.8 Max.
Insertion Loss Ripple (dB)	6100 – 712**5** MHz		2.2 Max.
Return Loss (dB)	6100 – 712**5** MHz	9.5 Min.	
Attenuation (dB)	30 – 1700 MHz	35 Min.	
	1980 – 2370 MHz	35 Min.	
	2400 – 2500 MHz	35 Min.	
	3960 – 4740 MHz	33 Min.	
	4740 – 5150 MHz	35 Min.	
	5170 – 5815 MHz	50 Min.	
	5815 – 5825 MHz	45 Min.	
	5825 - 5850 MHz	30 Min.	
	5900 – 5925 MHz	15 Min.	
	7925 – 8250 MHz	3 Min.	
	8250 – 9440 MHz	6 Min.	
	11890 – 14210 MHz	30 Min.	
	17385 – 21315 MHz	10 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 6613BP44A1025001CE1.

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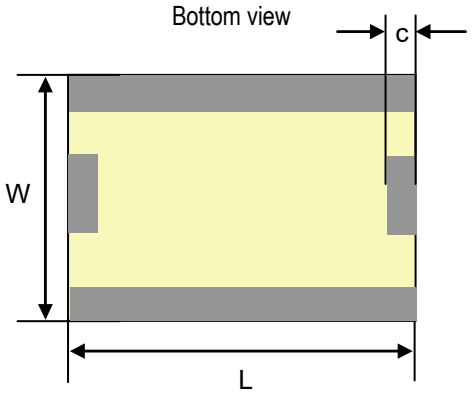
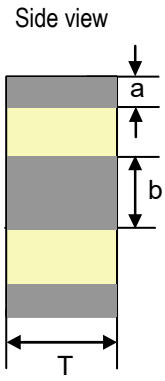
Mechanical Dimensions

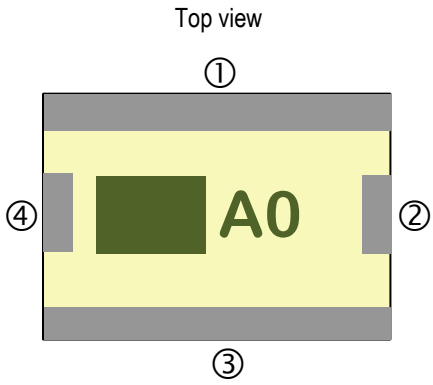
	Inches			Millimeters		
L	0.177	±	0.008	4.50	±	0.20
W	0.126	±	0.008	3.20	±	0.20
T	0.087		Max.	2.20		Max.
a	0.016	±	0.008	0.40	±	0.20
b	0.031	±	0.008	0.80	±	0.20
c	0.012	±	0.006	0.30	±	0.15





Terminal Configuration[3]

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.

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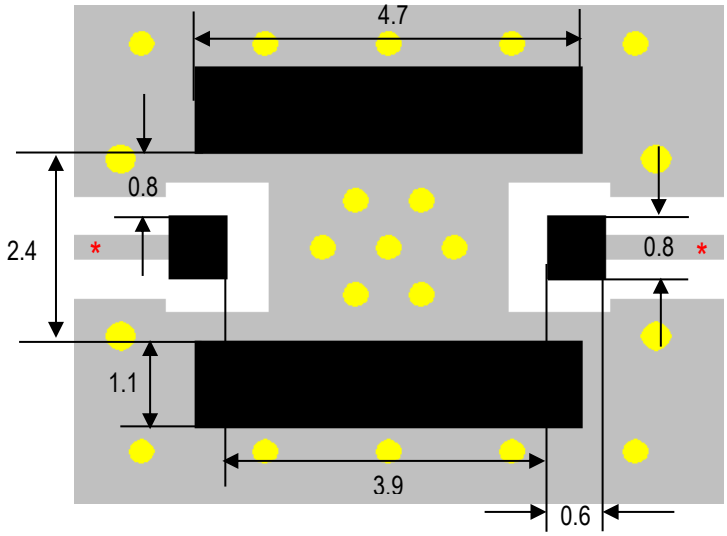
Recommended PCB Layout



Units in mm

Solder Resist

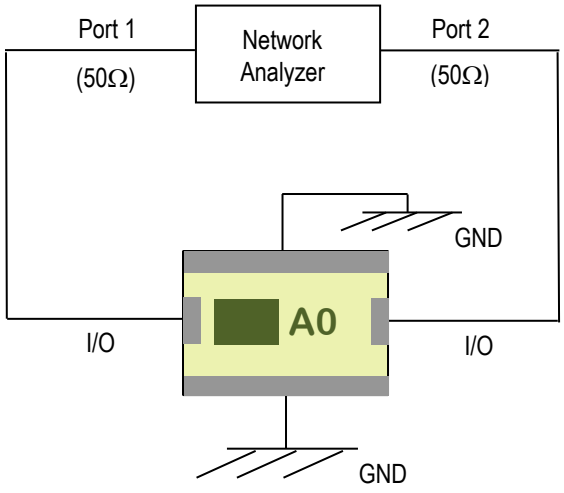
Land

Through-hole (ϕ0.3)

* 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



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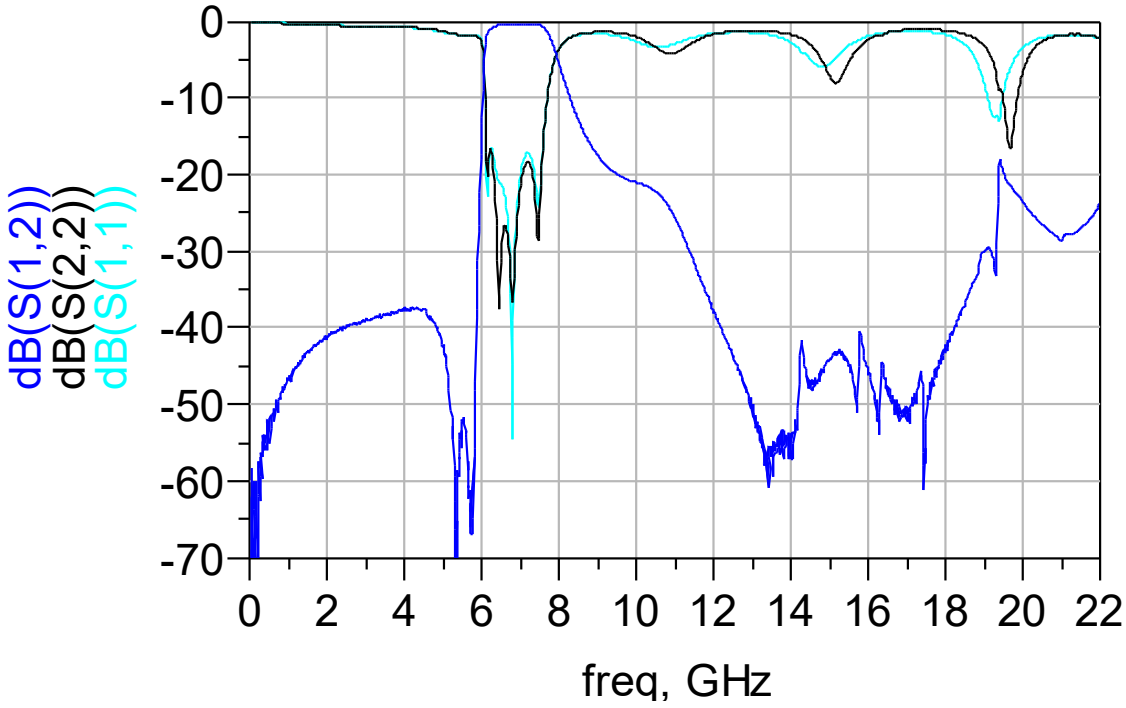
RF Measurements (T = 25°C)

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

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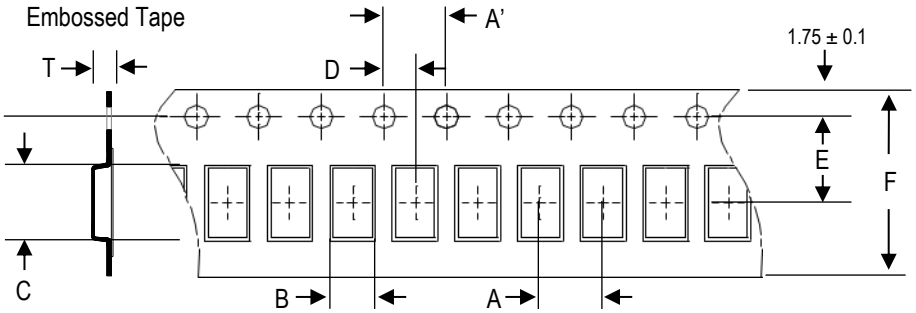
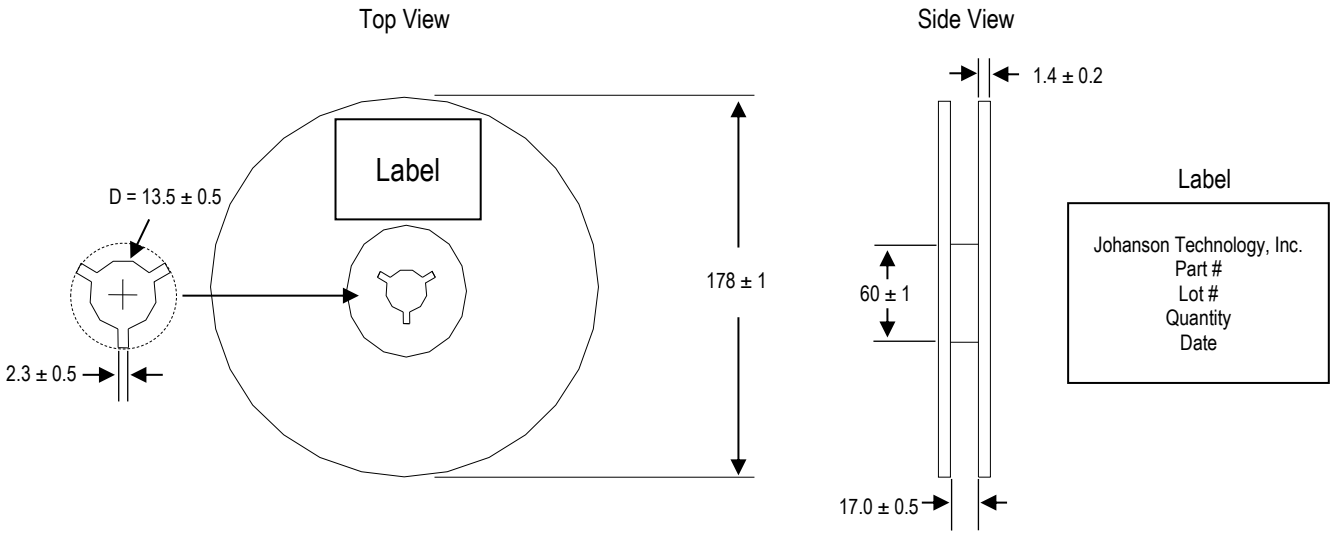
Tape and Reel Specifications (Units in mm)

Tape Dimensions

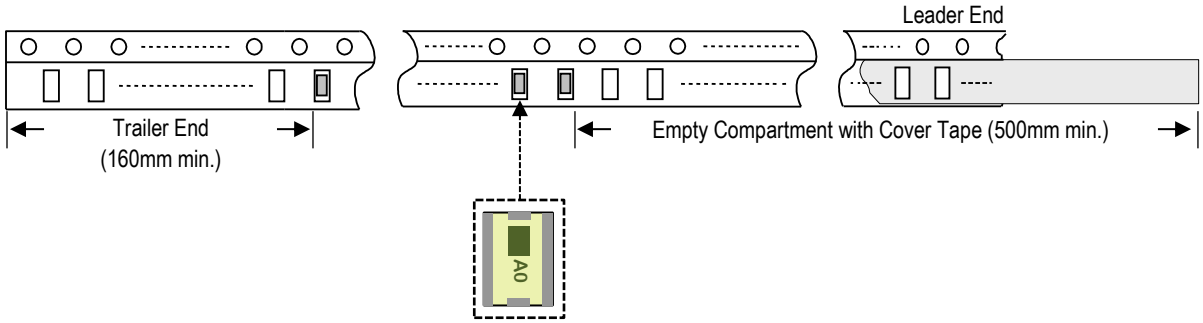


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
8.0 ± 0.1	4.0 ± 0.1	3.5 ± 0.1	4.9 ± 0.1	2.0 ± 0.1	5.5 ± 0.1	12.0 ± 0.1	2.2 ± 0.1	1,000 pcs	Plastic (Embossed)

Reel Dimensions



Leader and Trailer Dimensions



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Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	6613BP44A1025001B	Nickel Tin
T & R (7" Reel Embossed Tape)	6613BP44A1025001E (Qty: 1,000 pcs./reel)	
Evaluation Board with 2 SMA Connector	6613BP44A1025001CE1	

Important Links

6613BP44A1025001E 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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