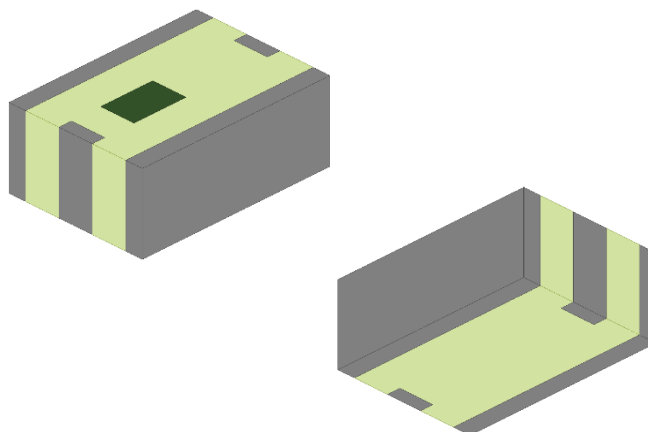




4 GHz Band Pass Filter

- 3800 - 4200 MHz passband
- Fit for wireless communication systems
- Low insertion loss
- High out-of-band rejection
- SMD, 5.5x3.2x2.2mm (LxWxT)
- RoHS complaint



General Specifications^{1 2}

Insertion Loss (dB)	3800 - 4200 MHz	2.5 Typ.	3.0 Max.
Return Loss (dB)	3800 - 4200 MHz		10 Min.
Attenuation (dB)	DC – 3600 MHz	40 Typ.	38 Min.
	4400 – 6600 MHz	40 Typ.	38 Min.

Maximum Ratings

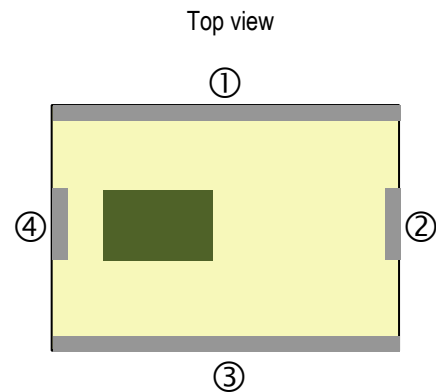
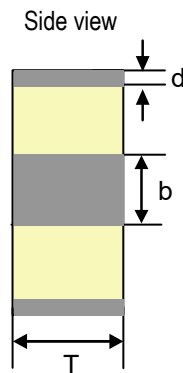
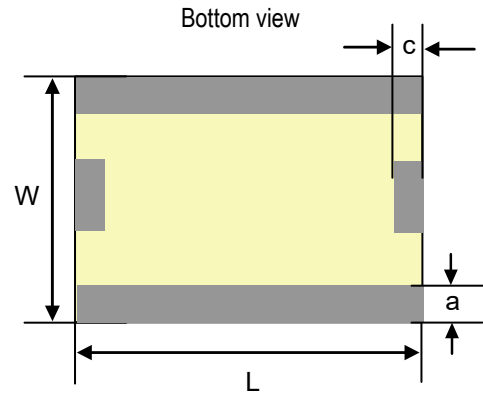
Power Capacity (W)	3 Max. (CW)
Operating Temperature (°C)	-40 to +85
Recommended Storage Conditions post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35°C 18 Months Max.

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 4000BP44A0400001CE1.

Mechanical Dimensions

	Inches			Millimeters		
L	0.217	±	0.008	5.50	±	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
d	0.010	±	0.004	0.25	±	0.10



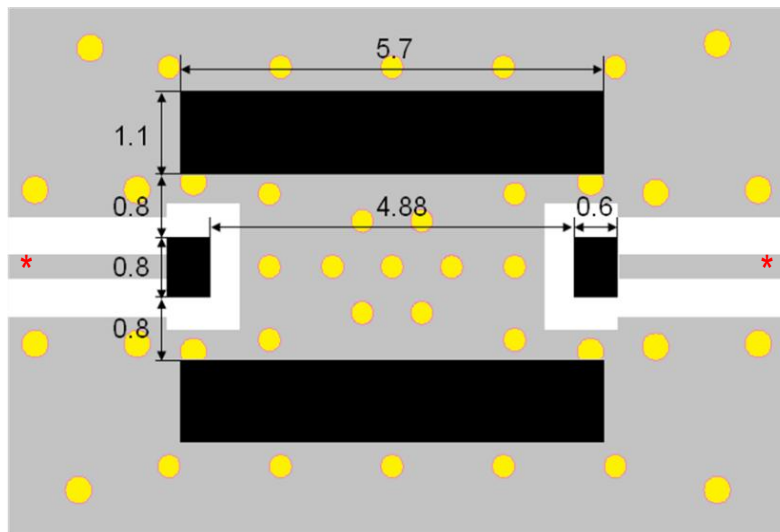
Terminal Configuration³

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

Note: Mount device with colored mark facing up.



Units in mm

Solder Resist

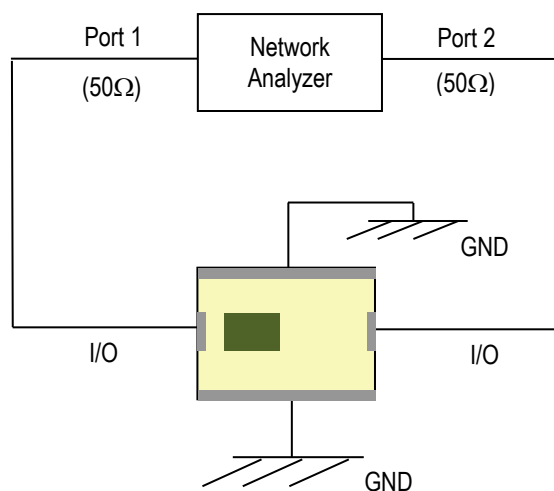
Land

Through-hole ($\phi 0.3$)

* 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>

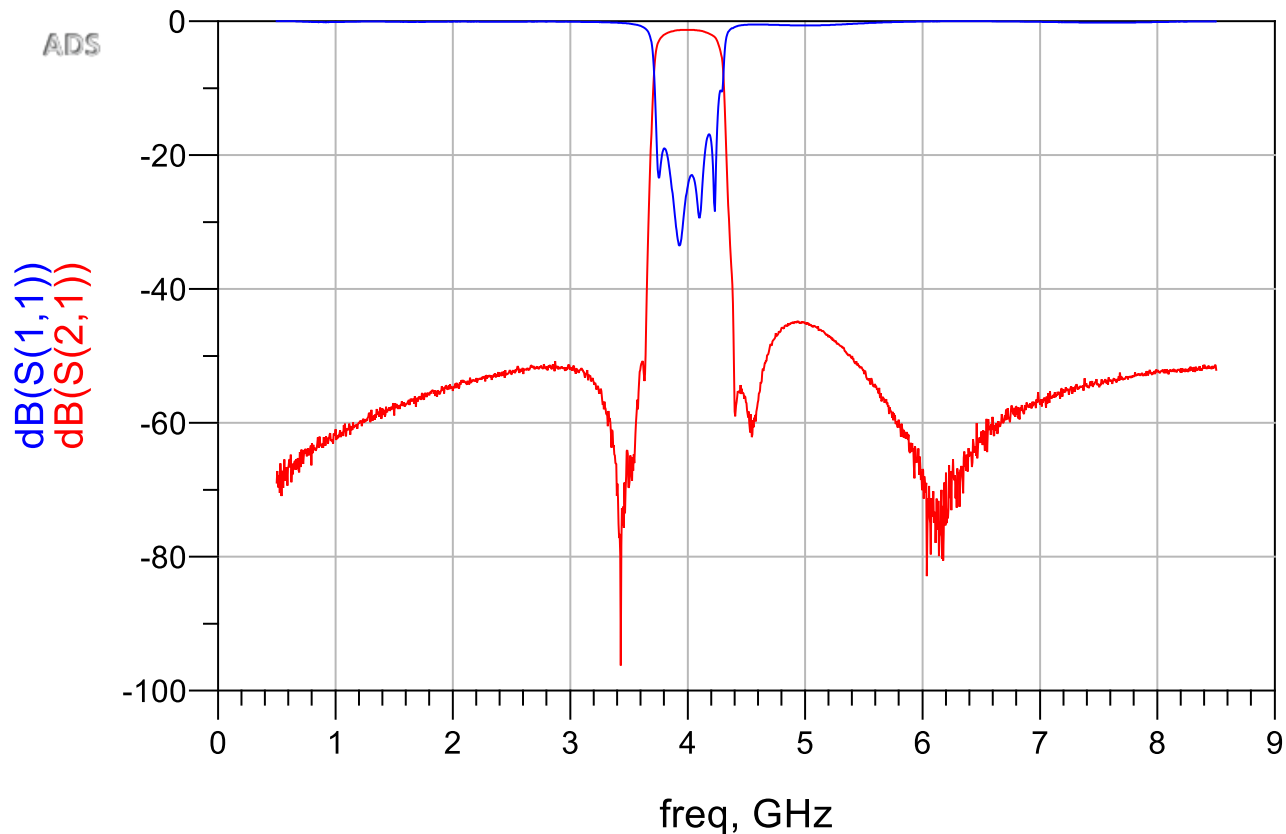
Measuring Diagram





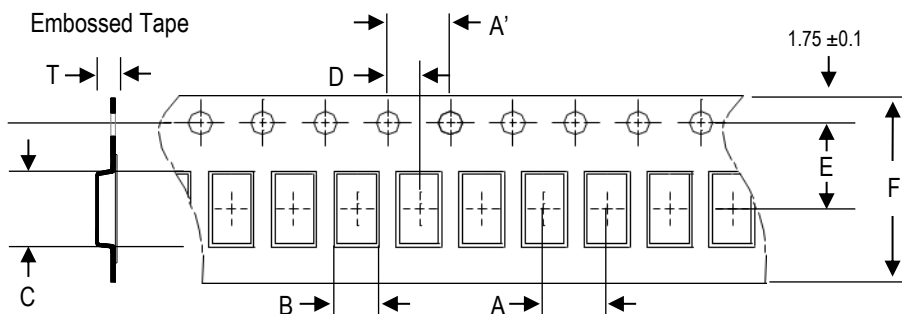
RF Measurement (T = 25°C)

Insertion Loss, Return Loss and Attenuation



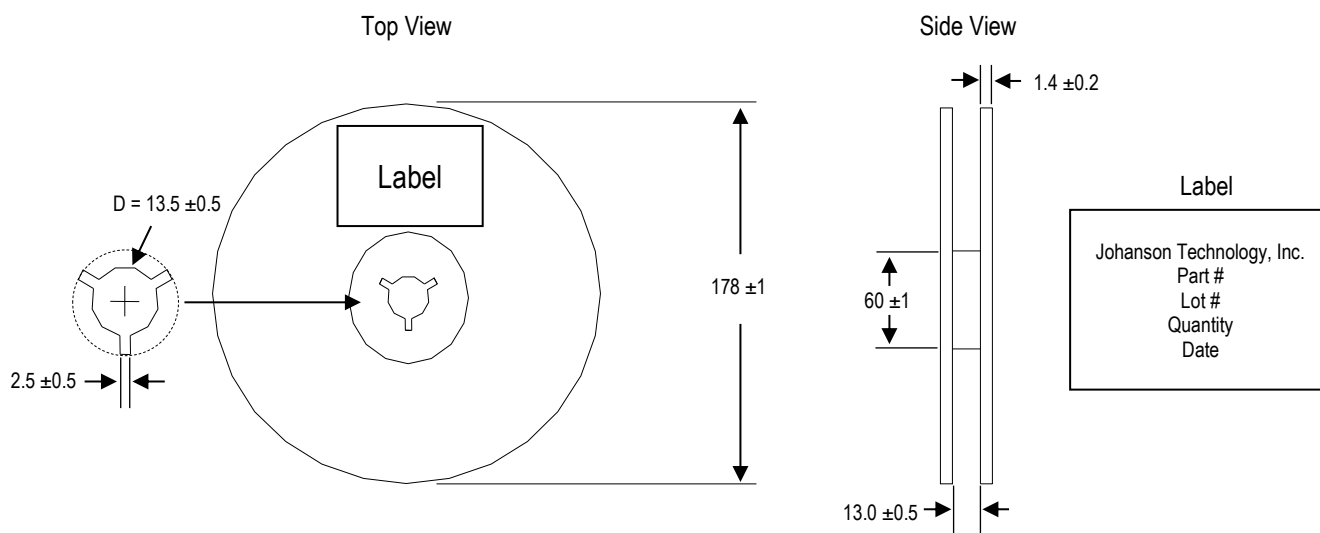
Tape and Reel Specifications (Units in mm)

Tape Dimensions

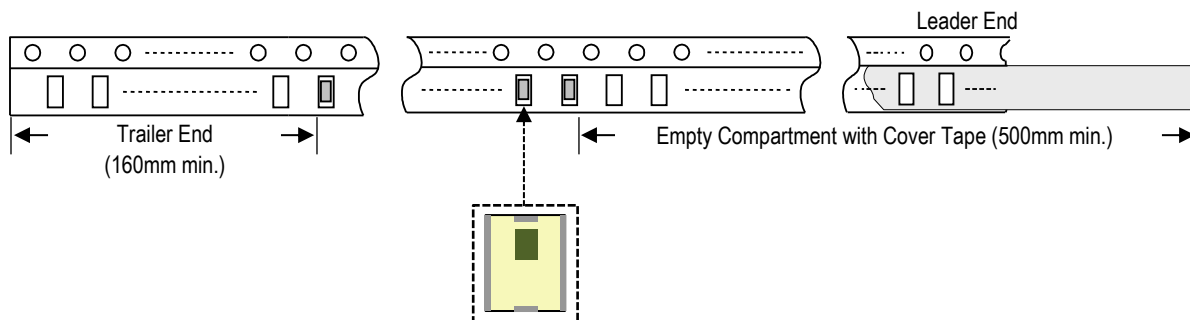


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
8.0 ±0.1	4.0 ±0.1	3.5 ±0.1	5.8 ±0.1	2.0 ±0.1	5.5 ±0.1	12.0 ±0.1	2.2 ±0.1	1,000 pcs	Plastic (Embossed)

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	4000BP44A0400001B	Nickel Tin
T & R (7" Reel Embossed Tape)	4000BP44A0400001E (Qty: 1,000 pcs./reel)	
Evaluation Board with 2 SMA Connector	4000BP44A0400001CE1	

Important Links

[4000BP44A0400001E Product Page](#)

[More Band Pass Filters](#)

[Soldering Information](#)

[MSL Information](#)

[Packaging Information](#)

[Recommended Storage Condition and Max Shelf Life](#)

[RoHS Compliance](#)

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