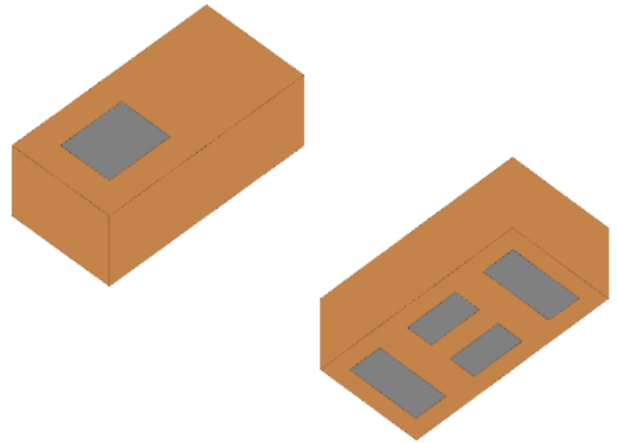




4.7 GHz Band Pass Filter

- 4400 - 5000 MHz passband
- Fit for wireless communication systems
- Low insertion loss
- High out-of-band rejection
- SMD, EIA 0603
- RoHS complaint



General Specifications^{1 2}

Insertion Loss (dB)	4400 - 5000 MHz	1.9 Typ.	2.5 Max.
Return Loss (dB)	4400 - 5000 MHz		10 Min.
Attenuation (dB)	DC - 2170 MHz	42 Typ.	38 Min.
	2300 - 2700 MHz	42 Typ.	30 Min.
	5500 - 5850 MHz	23 Typ.	20 Min.

Maximum Ratings

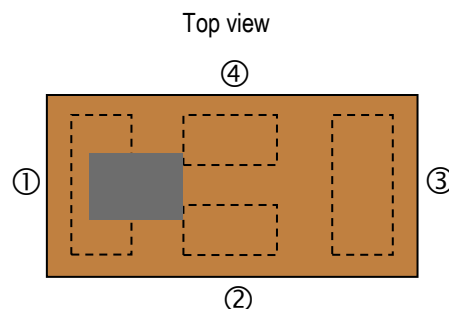
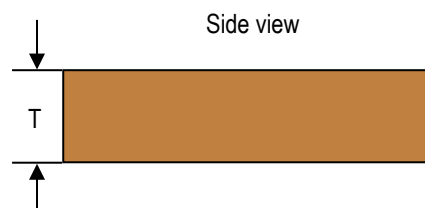
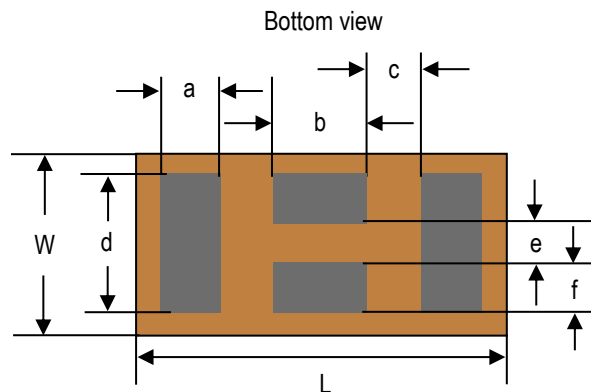
Power Capacity (W)	3 Max. (CW)
Operating Temperature (°C)	-40 to +85
Recommended Storage Conditions post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

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 P/N 4700BP14A0600001CE1.

Mechanical Dimensions

	Inches			Millimeters		
L	0.063	±	0.006	1.60	±	0.15
W	0.031	±	0.006	0.80	±	0.15
T	0.016		Max.	0.40		Max.
a	0.010	±	0.002	0.25	±	0.05
b	0.016	±	0.004	0.40	±	0.10
c	0.009	±	0.004	0.23	±	0.10
d	0.022	±	0.004	0.55	±	0.10
e	0.008	±	0.002	0.21	±	0.05
f	0.008	±	0.002	0.20	±	0.05



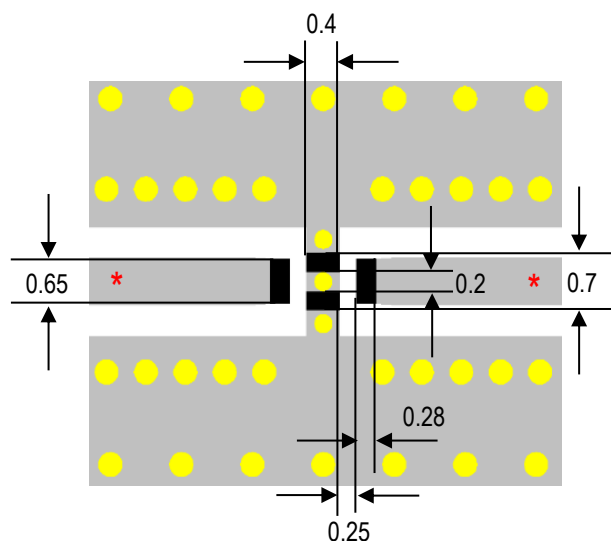
Terminal Configuration³

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

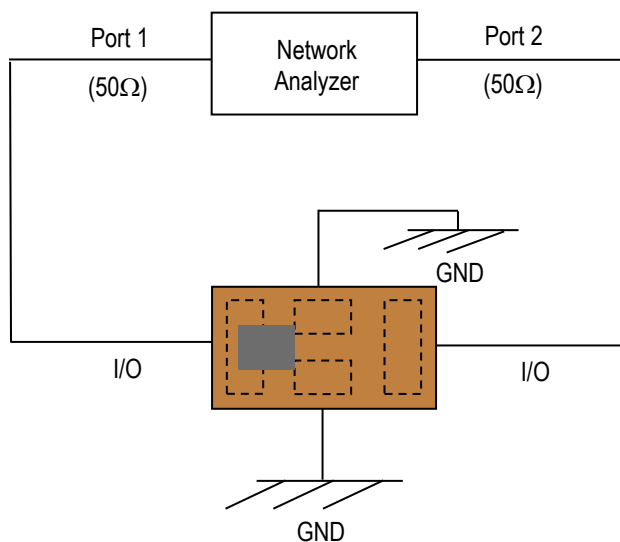


Through-hole (ϕ 0.3, 0.23)

* 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>

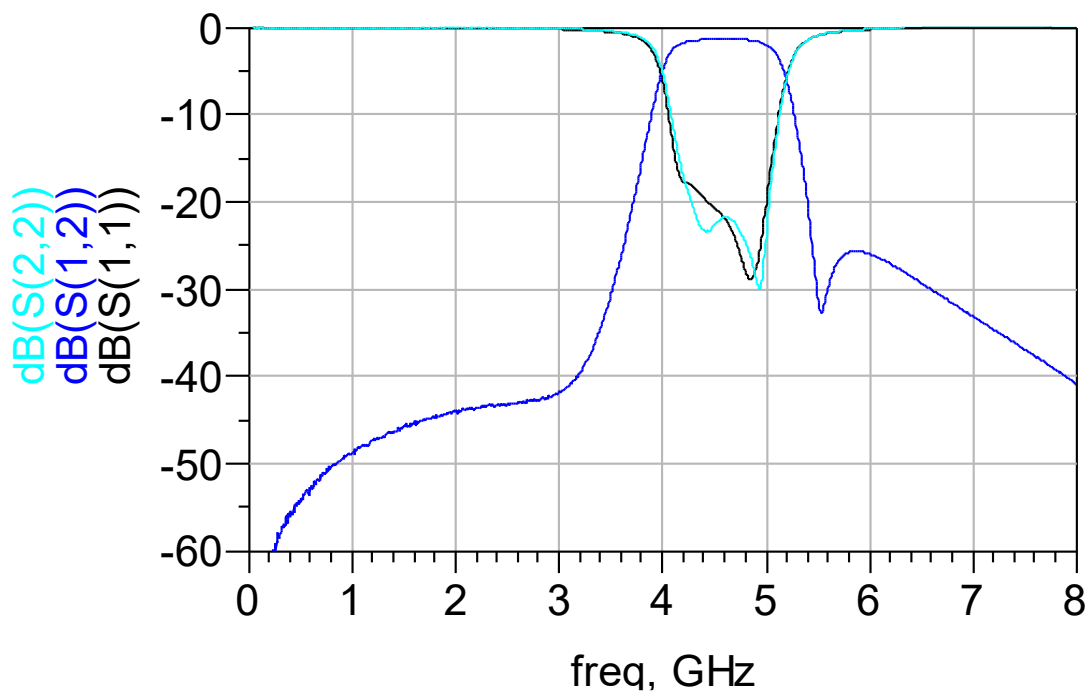
Measuring Diagram





RF Measurement (T = 25°C)

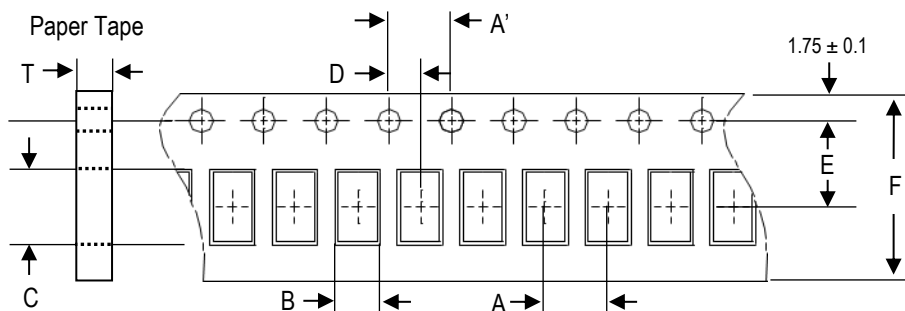
Insertion Loss, Return Loss and Attenuation



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

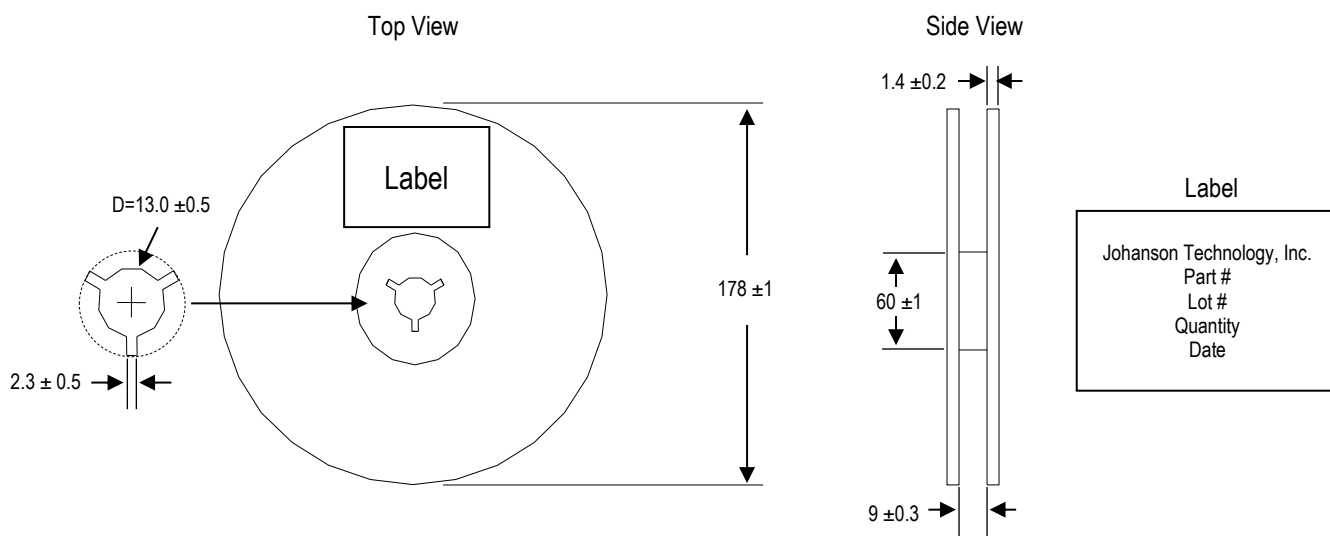
Tape and Reel Specification (Units in mm)

Tape Dimensions

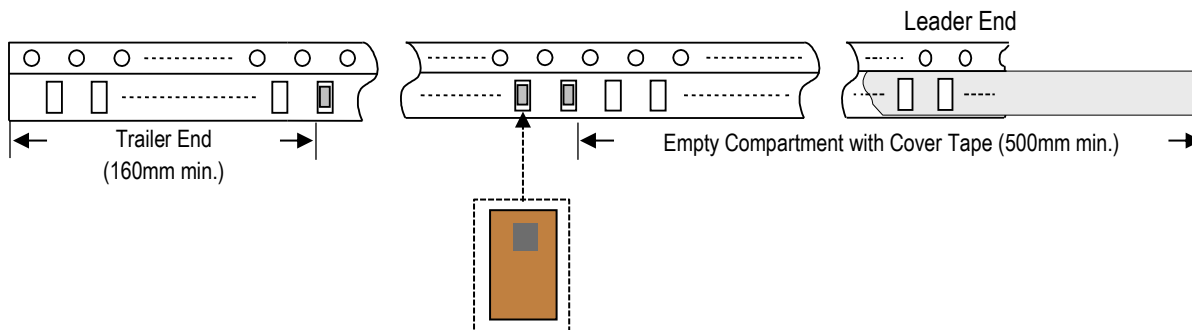


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ± 0.1	4.0 ± 0.1	0.95 ± 0.1	1.80 ± 0.1	2.0 ± 0.1	3.5 ± 0.1	8.0 ± 0.1	0.60 ± 0.03	4,000 pcs.	Paper

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Number

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	4700BP14A0600001B	Nickel Tin
T & R (7" Reel Paper Tape)	4700BP14A0600001T (Qty: 4,000 pcs./reel)	
Evaluation Board with 2 SMA Connectors	4700BP14A0600001CE1	

Important Links

[4700BP14A0600001T 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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