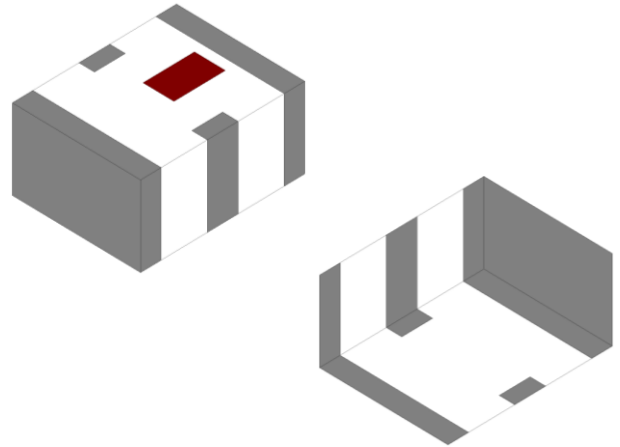


1.9 GHz High Pass Filter

- 1.65 - 2.15 GHz passband
- Fit for wireless communication systems: Bluetooth, WiFi, WLAN, etc.
- SMD, 3.2 x 2.5 x 1.5 mm (LxWxT)
- RoHS compliant



General Specifications^{1 2}

Insertion Loss (dB)	1650 - 2150 MHz	2.0 Max.
Return Loss (dB)	1650 - 2150 MHz	8.5 Min.
Ripple (dB)	1650 - 1675 MHz	0.25 Max.
Attenuation (dB)	950 - 1450 MHz	27 Min.

Maximum Ratings

Power Capacity (W)	0.5 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 ³	45% - 75% RH +5 to +35 °C 18 Months Max.

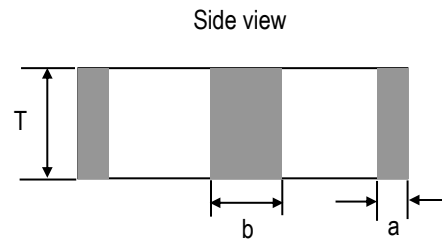
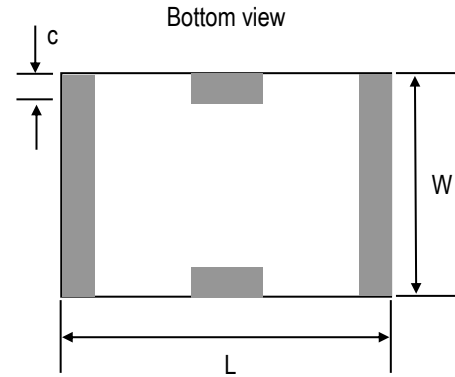
¹ Typical value represents average measurement at 25°C. Min./Max. values represent measurements over specified operating temperature.

² General specifications measured on Johanson's evaluation board PN 1900HP41C0500001CE1.

³ 18 months max. in vacuum sealed bag and 1 week after opened. Please keep unused parts in vacuum sealed bags. For more info go to <https://www.johansontechnology.com/silverleads-profile>.

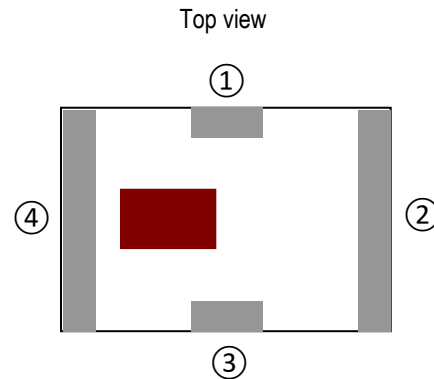
Mechanical Dimensions

	Inches			Millimeters		
L	0.126	±	0.008	3.20	±	0.20
W	0.098	±	0.008	2.50	±	0.20
T	0.059	±	0.004	1.50	±	0.10
a	0.016	±	0.008	0.40	±	0.20
b	0.024	±	0.008	0.60	±	0.20
c	0.012	±	0.006	0.30	±	0.15



Terminal Configuration⁴

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

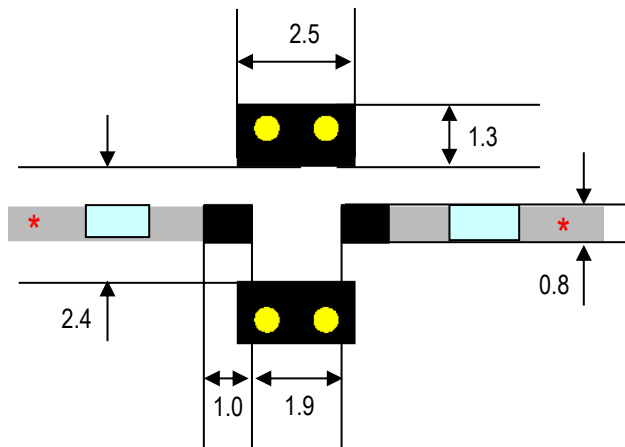


⁴ The termination type is Silver. Go to <https://www.johansontechnology.com/tech-notes/silver-leaded-components-soldering-profile> for Typical Soldering Profile. SAC 305 solder paste recommended.







Recommended PCB Layout

Note: Mount device with directional marking facing up.



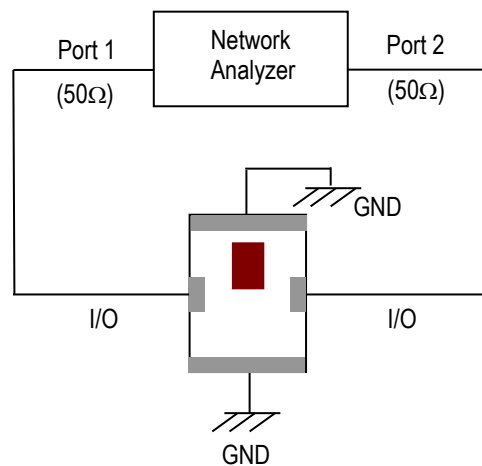
Units in mm

-  Solder Resist
-  Land
-  Through-hole ($\phi 0.5$)
-  DC Blocking Capacitor

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

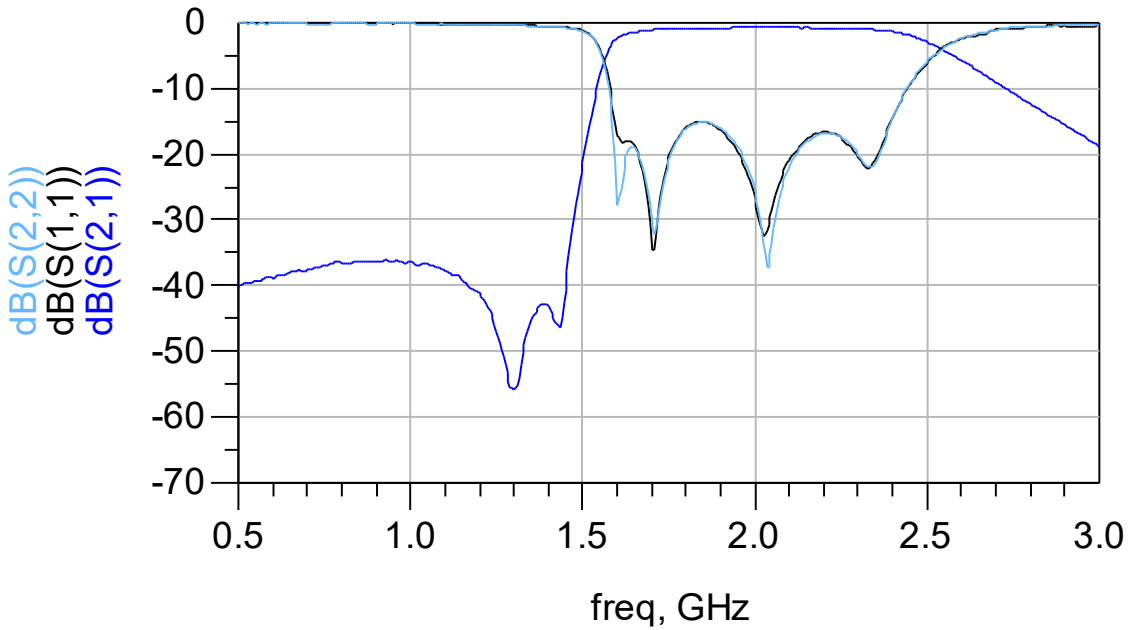
If you'd like the CAD PCB layout or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

Measuring Diagram



RF Measurement (T = 25°C)

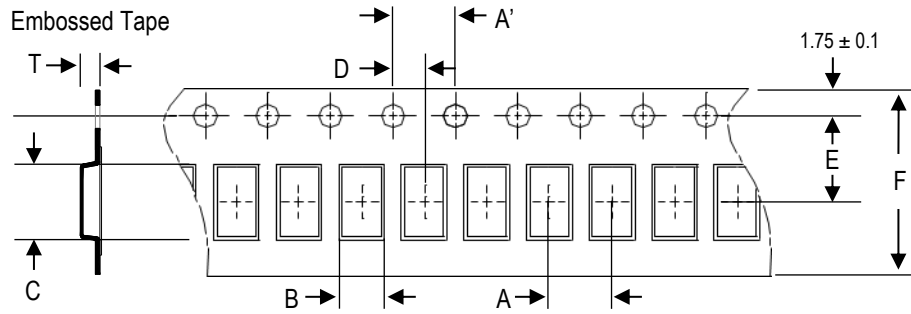
Insertion Loss, Return Loss and Attenuation



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

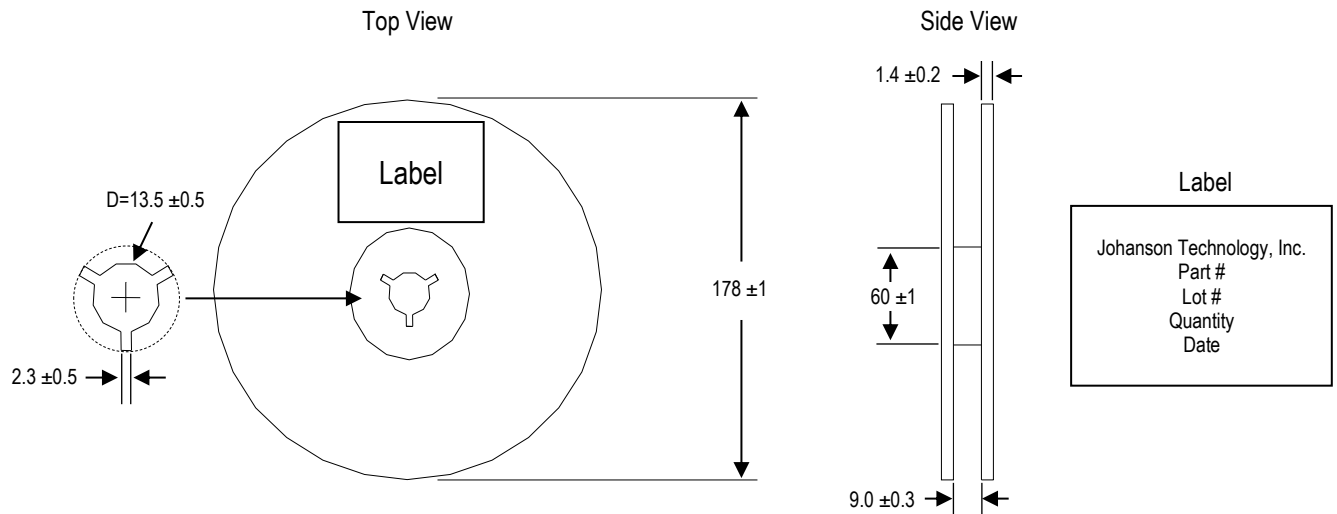
Tape and Reel Specifications (Units in mm)

Tape Dimensions

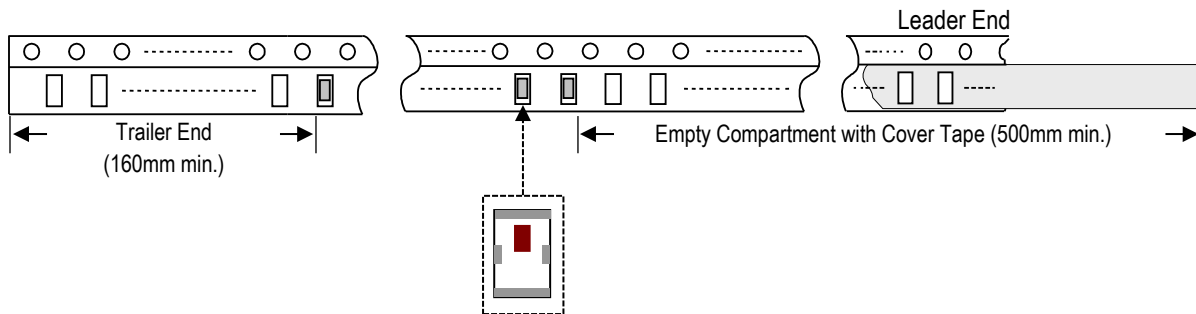


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ±0.1	4.0 ±0.1	2.75 ±0.1	3.45 ±0.1	2.0 ±0.1	3.5 ±0.1	8.0 ±0.1	1.7 ±0.1	2,000pcs.	Plastic (Embossed)

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	1900HP41C0500001B	Silver
T & R (7" Reel Embossed Tape)	1900HP41C0500001E (Qty: 2,000 pcs./reel)	
Evaluation Board with 2 SMA Connector	1900HP41C0500001CE1	

Important Links

[1900HP41C0500001E Product Page](#)

[More High Pass Filters](#)

[Antenna Tuning, Optimization, and Validation Services](#)

[Soldering Information](#)

[MSL Information](#)

[Packaging Information](#)

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

[RoHS Compliance](#)

Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.