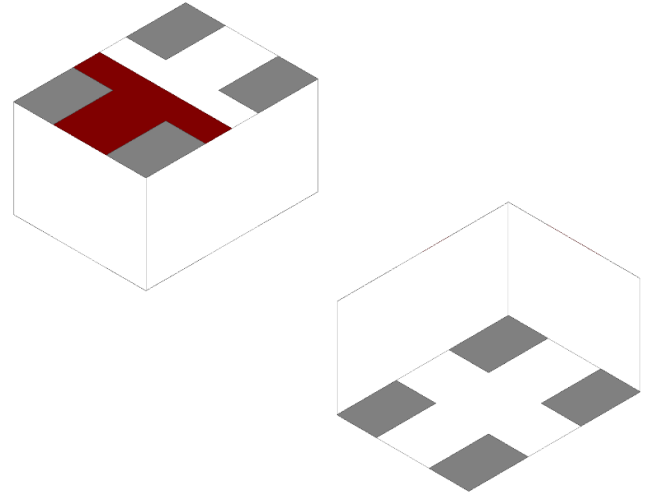


5.4 GHz Micro High Pass Filter

- 4900 - 5850 MHz passband
- Fit for 5.4 GHz wireless communication systems such as WiFi and 5GHz IoT applications
- Low insertion loss
- Ultra small SMD, EIA 0202 (0.6 x 0.5 x 0.4mm)
- RoHS compliant



General Specifications^{1 2}

Insertion Loss (dB)	4900 - 5850 MHz	0.65 Max. (+85°C) 0.75 Max. (+105°C)
Return Loss (dB)	4900 - 5850 MHz	9.5 Min.
Attenuation (dB)	2400 - 2500 MHz	20 Min.

Maximum Ratings

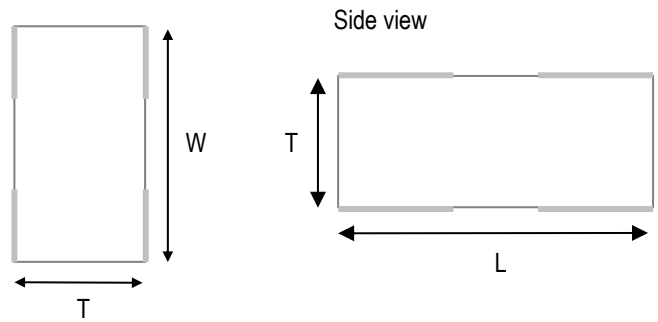
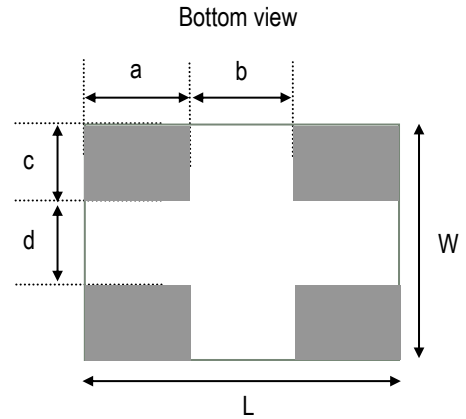
Power Capacity (W)	2 Max. (CW)
Operating Temperature (°C)	-40 to +105
Recommended Storage Conditions post-installation (°C)	-40 to +105
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

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 5400HP05A0950001CE1.

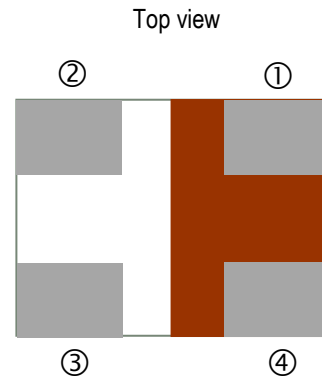
Mechanical Dimensions

	Inches		Millimeters	
L	0.026	± 0.002	0.65	± 0.05
W	0.020	± 0.002	0.50	± 0.05
T	0.015	Max.	0.37	Max.
a	0.009	+0.004/-0.002	0.225	+0.10/-0.05
b	0.008	+0.004/-0.002	0.20	+0.10/-0.05
c	0.006	+0.004/-0.002	0.15	+0.10/-0.05
d	0.008	+0.004/-0.002	0.20	+0.10/-0.05



Terminal Configuration³

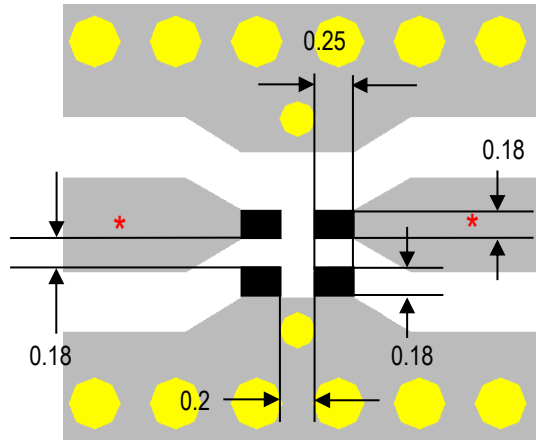
Pin Number	Function
1	INPUT/OUTPUT
2	INPUT/OUTPUT
3	GND
4	GND




³ The termination type is Nickel Tin. Go to: <https://www.johansontechnology.com/ipcsoldering-profile> for Typical Soldering Profile.

Recommended PCB Configuration


Note: Mount device with colored mark facing up.



Units in mm

 Solder Resist

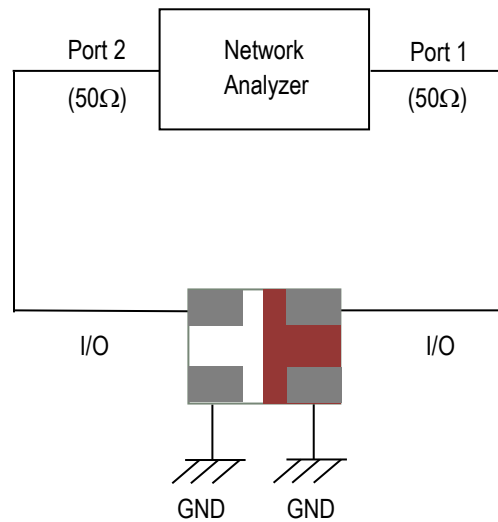
 Land

 Through-hole (ϕ 0.2/0.3)

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

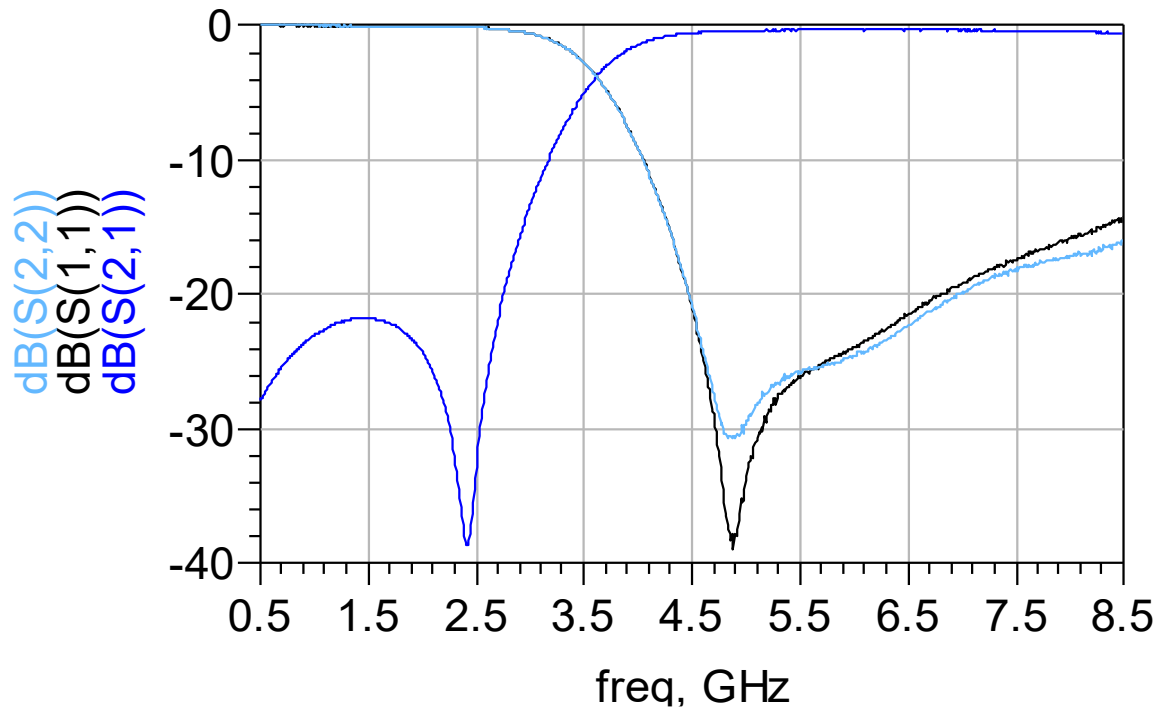
If you'd like the CAD PCB layout or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

Measuring Diagram



RF Measurement (T = 25°C)

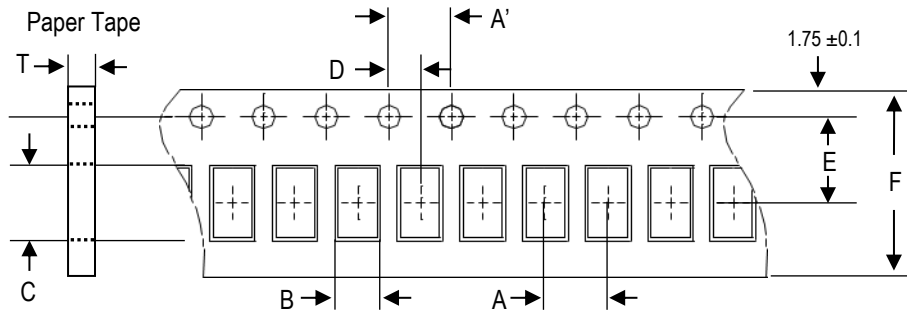
Insertion Loss, Return Loss



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

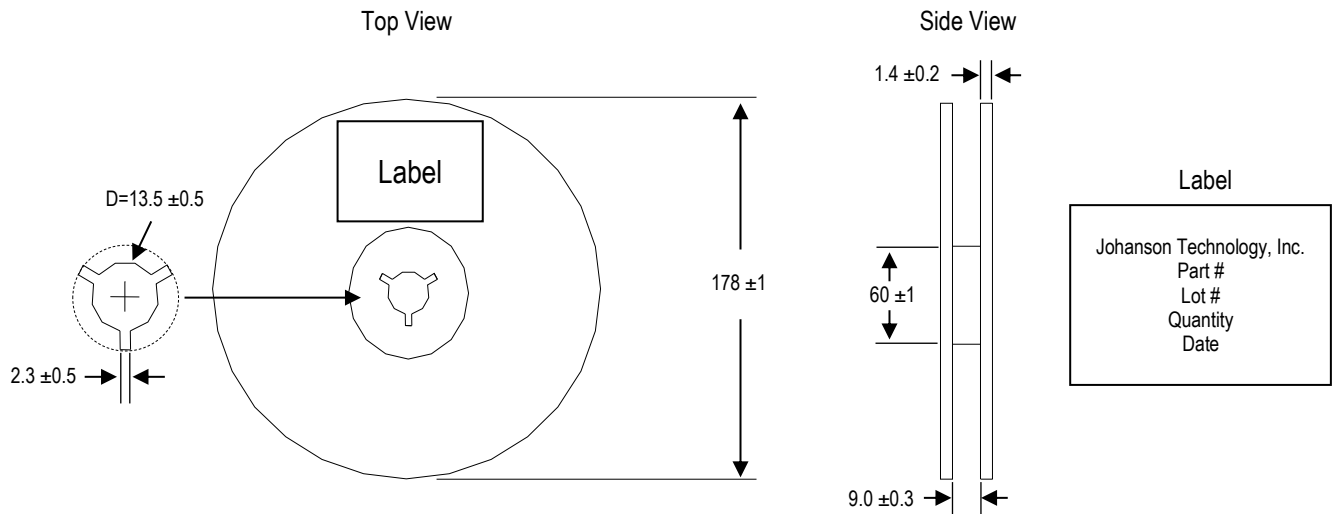
Tape and Reel Specification (Units in mm)

Tape Dimensions

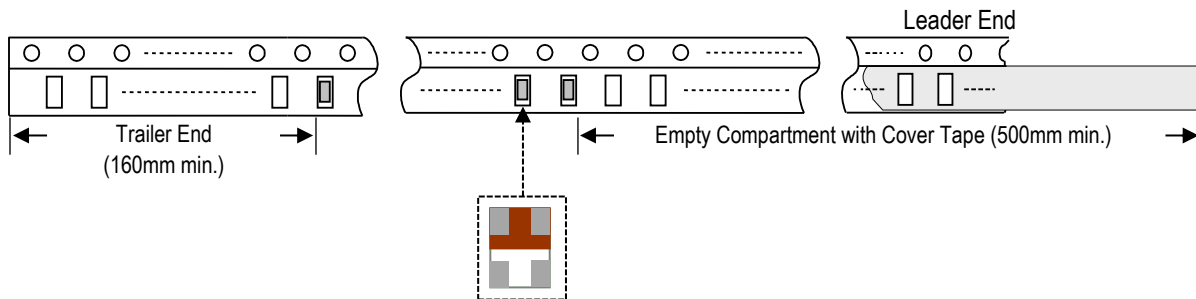


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
2.0 ±0.05	4.0 ±0.1	0.58 ±0.03	0.78 ±0.03	2.0 ±0.05	3.5 ±0.05	8.0 ±0.2	0.38 ±0.03	10,000 pcs.	Paper

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	5400HP05A0100001B	Nickel Tin
T & R (7" Reel Paper Tape)	5400HP05A0100001T (Qty: 10,000 pcs/reel)	
Evaluation Board with 2 SMA Connectors	5400HP05A0100001CE1	

Important Links

[5400HP05A0100001T 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](#)

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