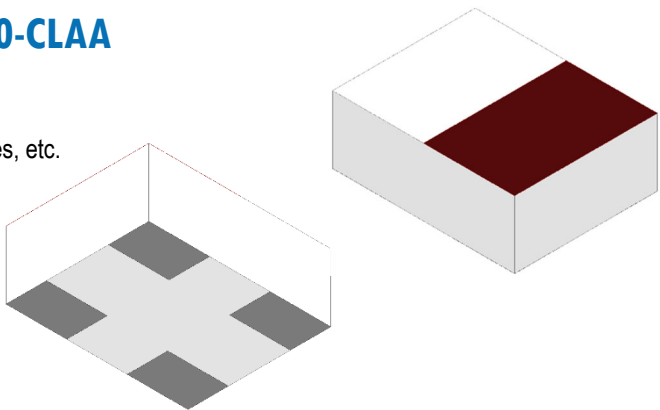




2.4GHz Filter, Impedance-matched to nRF5340-CLAA

- Low loss and high attenuation for bands outside passband
- For Mobile wireless applications, including GSM/WCDMA/LTE phones, etc.
- Micro EIA 0202 size
- Operation up to 105°C (Commercial)



General Specifications

Passband Frequency (MHz)	2400 - 2482
Impedance (Ω)	Impedance match to nRF5340-CLAA
Insertion Loss (dB)	0.7 max. @25°C 0.85 max. @-40 to +105°C
Return Loss (dB)	10 min.
Attenuation	
Frequency Range (MHz) Attenuation (dB)	4800 - 4964 30 min.
Frequency Range (MHz) Attenuation (dB)	5150 - 6425 28 min.
Frequency Range (MHz) Attenuation (dB)	7200 - 7446 35 min.
Frequency Range (MHz) Attenuation (dB)	9600 - 9928 30 min.
Frequency Range (MHz) Attenuation (dB)	12000 - 12410 40 min.
Frequency Range (MHz) Attenuation (dB)	13840 - 17840 20 min.
Frequency Range (MHz) Attenuation (dB)	14400 - 14892 30 min.
Frequency Range (MHz) Attenuation (dB)	16800 - 17374 30 min.
Frequency Range (MHz) Attenuation (dB)	17500 - 20000 27 min.

Maximum Ratings

Power Capacity (W)	3 Max. (CW)
Recommended Solder Paste	SAC 305
Operating Temperature (°C)	-40 to +105
Recommended Storage Conditions Post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product ¹	45% - 75% RH +5 to +35 °C 18 Months Max.

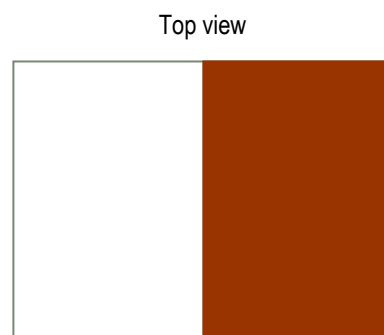
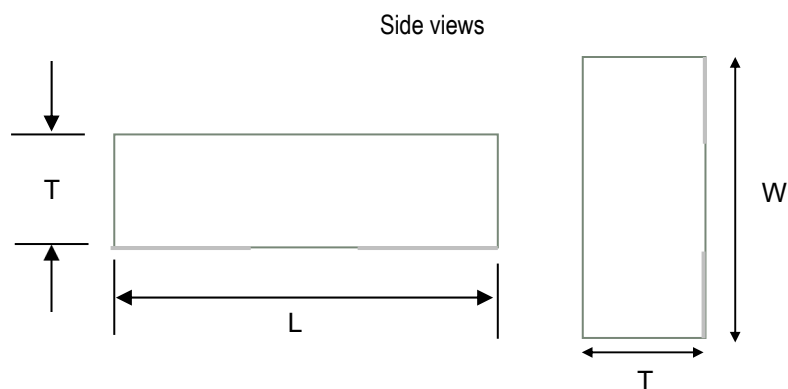
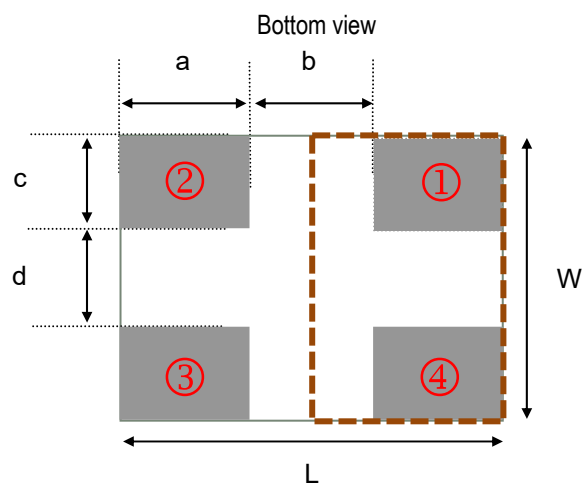
¹ 18 months max. in vacuum sealed bag and 1 week after opened. Please keep unused parts in vacuum sealed bags.
For more info go to <https://www.johansontechnology.com/silverleads-profile>.

Mechanical Dimensions

	Inches		Millimeters	
L	0.027	max.	0.675	max.
W	0.021	max.	0.53	max.
T	0.010	max.	0.25	max.
a	0.009	+0.004/-0.002	0.225	+0.1/-0.05
b	0.008	+0.004/-0.002	0.20	+0.1/-0.05
c	0.006	+0.004/-0.002	0.15	+0.1/-0.05
d	0.008	+0.004/-0.002	0.20	+0.1/-0.05

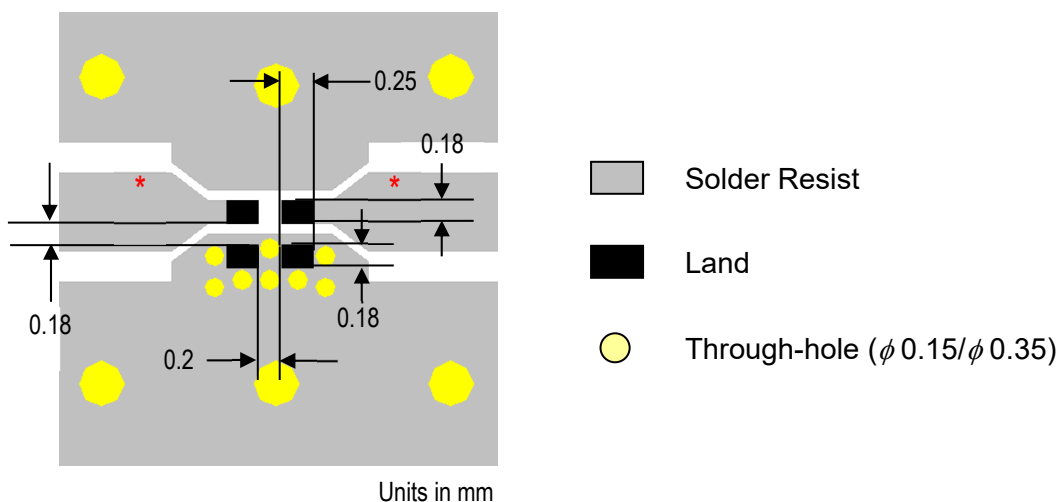
Terminal Configuration

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



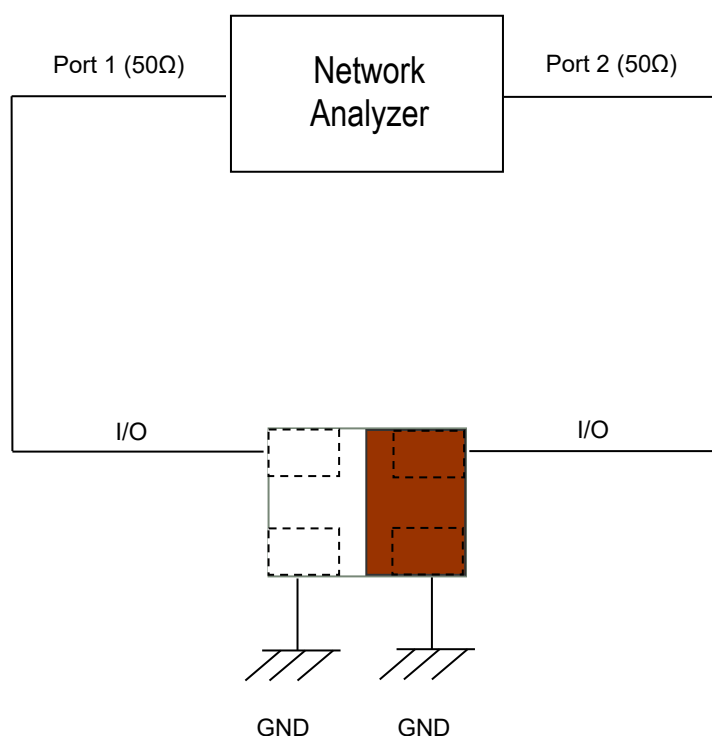


PCB Layout



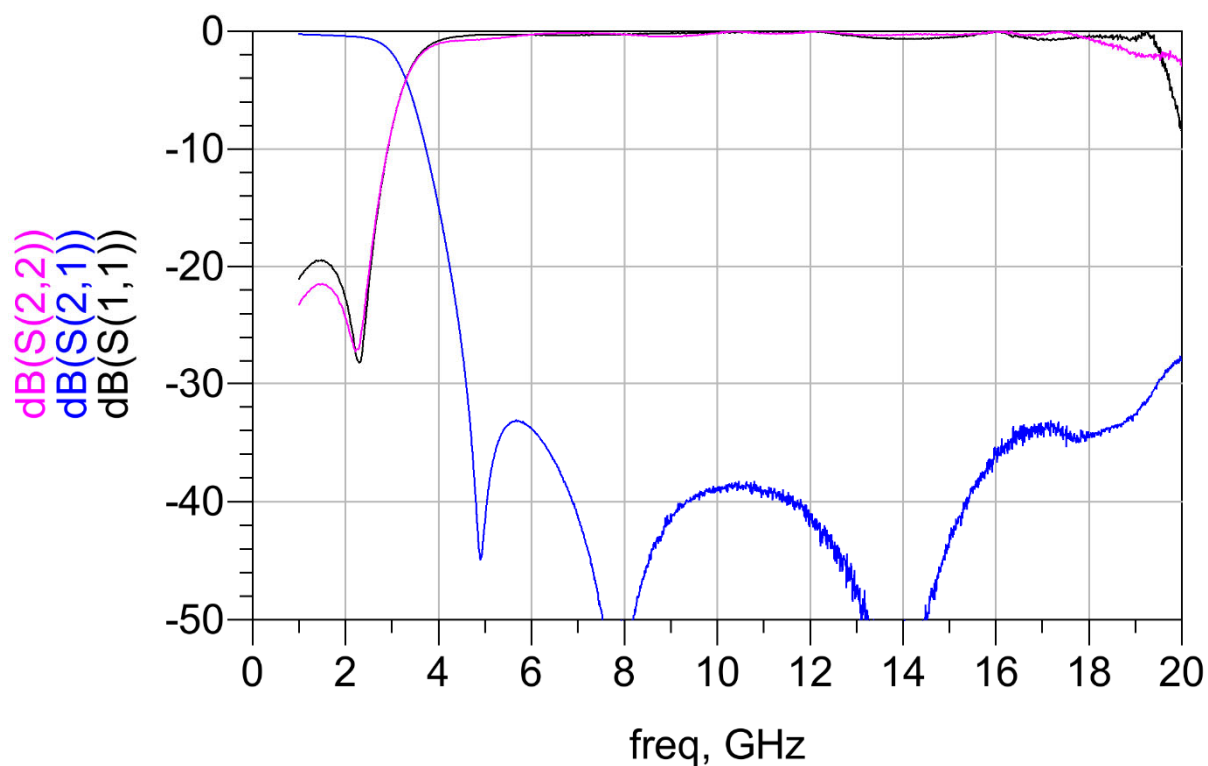
If you'd like the CAD PCB layout or have any questions,
contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

Measuring Diagram





RF Measurement



S-parameter and layout file available upon request. Please contact us at <https://www.johansontechnology.com/ask-a-question>.

Orderable Part Number

Part Number Explanation		
Packaging Style	Bulk (loose pcs.)	P/N. 2450FM05A0045001B
	T & R (7" Reel Paper Tape)	P/N. 2450FM05A0045001T (Qty: 10,000 pcs./reel)
Evaluation Board	Non-Conductive Bags	P/N. 2450FM05A0045001CE1
	Assembled PCB 1 (50Ω SMA)	

Important Links

[More Nordic Semiconductor Reference Designs Matched Filter](#)

[2.4GHz Antennas](#)

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

[Soldering Information](#)

[MSL Information](#)

[Packaging Information](#)

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

[RoHS Compliance](#)

Changelog	
1.0	Initial Release