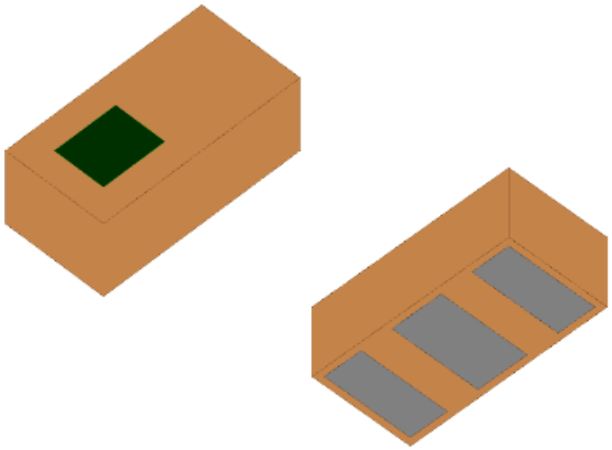
2025 MHz LTE Low Pass Filter

- 800 - 1000 MHz, 1700 - 1910 MHz, 2010 - 2025 MHz passband
- Fit for wireless communication systems such as ISM, DECT, Cellular 4G LTE, 5G applications, etc.
- Low insertion loss
- SMD, EIA 0805 (LGA pads)
- RoHS compliant



General Specifications[1] [2]

Insertion Loss (dB)	800 – 1000 MHz	0.5 Typ.	0.6 Max.
	1700 – 1910 MHz	0.8 Typ.	0.9 Max.
	2010 – 2025 MHz	1.5 Typ.	1.6 Max.
Return Loss (dB)	800 – 1000 MHz 1700 – 1910 MHz 2010 – 2025 MHz	9.5 Min.	
Attenuation (dB)	2300 – 6100 MHz	20 Min.	
	3700 – 4100 MHz	30 Min.	
	6100 – 8000 MHz	10 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[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 2025LP15A1225001CE1.
[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.

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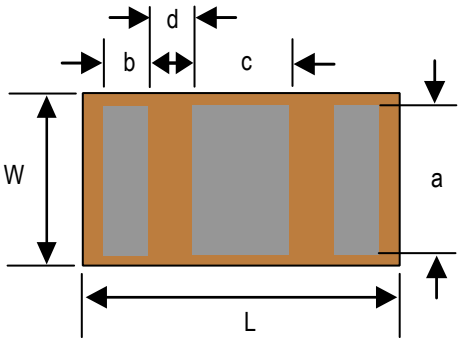
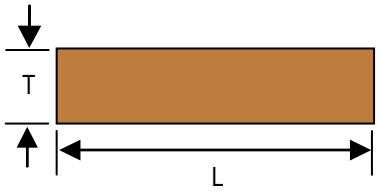
Mechanical Dimensions

	Inches			Millimeters		
L	0.079	±	0.006	2.0	±	0.15
W	0.049	±	0.004	1.25	±	0.10
T	0.037 Max			0.95 Max.		
a	0.037	±	0.004	0.95	±	0.10
b	0.011	±	0.004	0.275	±	0.10
c	0.024	±	0.004	0.60	±	0.10
d	0.010	±	0.002	0.25	±	0.05

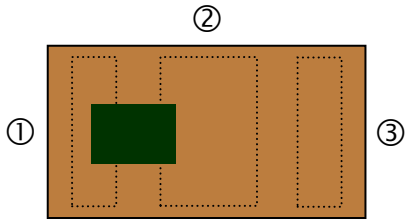
Bottom view



Side view



Top view



Terminal Configuration[4]

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

[4] The termination type is Silver. Go to: https://www.johansontechnology.com/tech-notes/typical-soldering-profile-ipc/ for Typical Soldering Profile. SAC 305 solder paste recommended.

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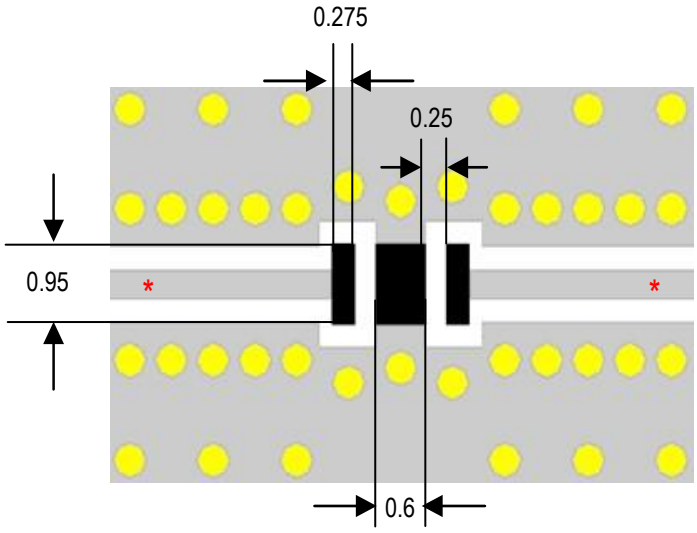
Recommended PCB Layout



Units in mm

Solder Resist

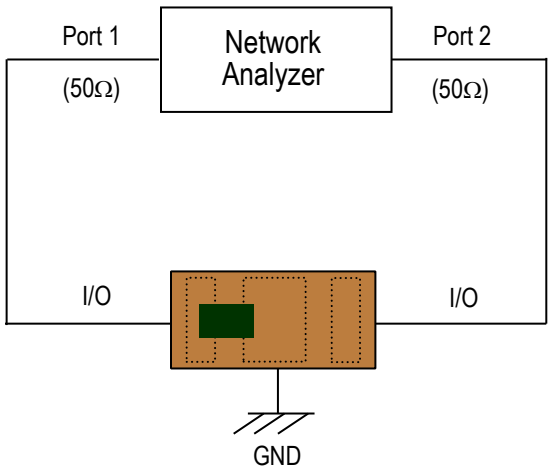
Land

Through-hole (ϕ0.35)

* 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



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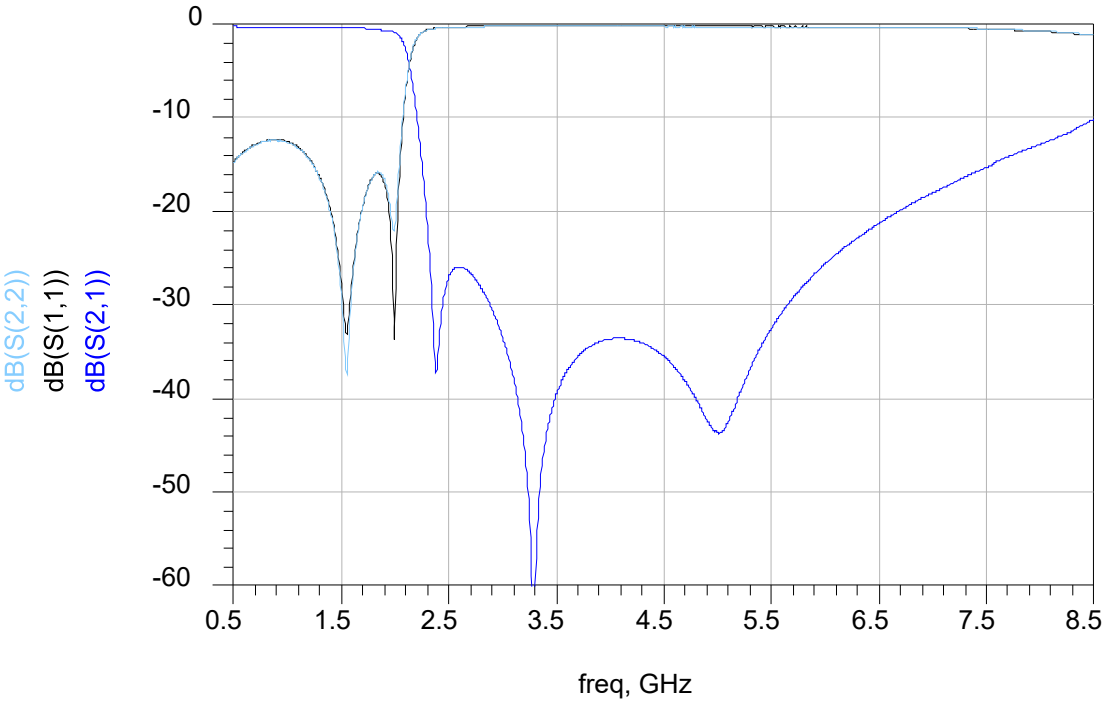
RF Measurement (T = 25°C)

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

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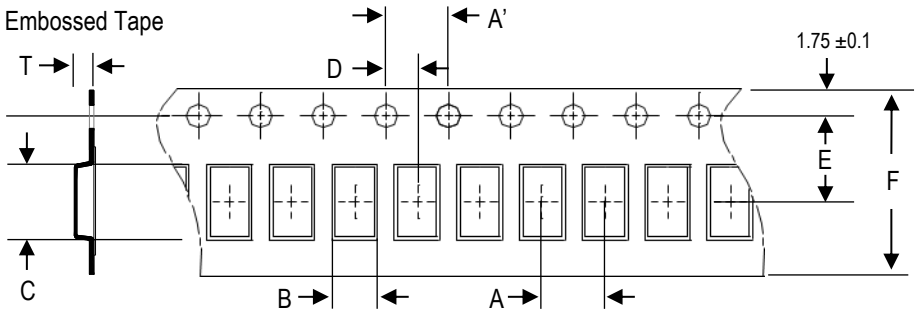
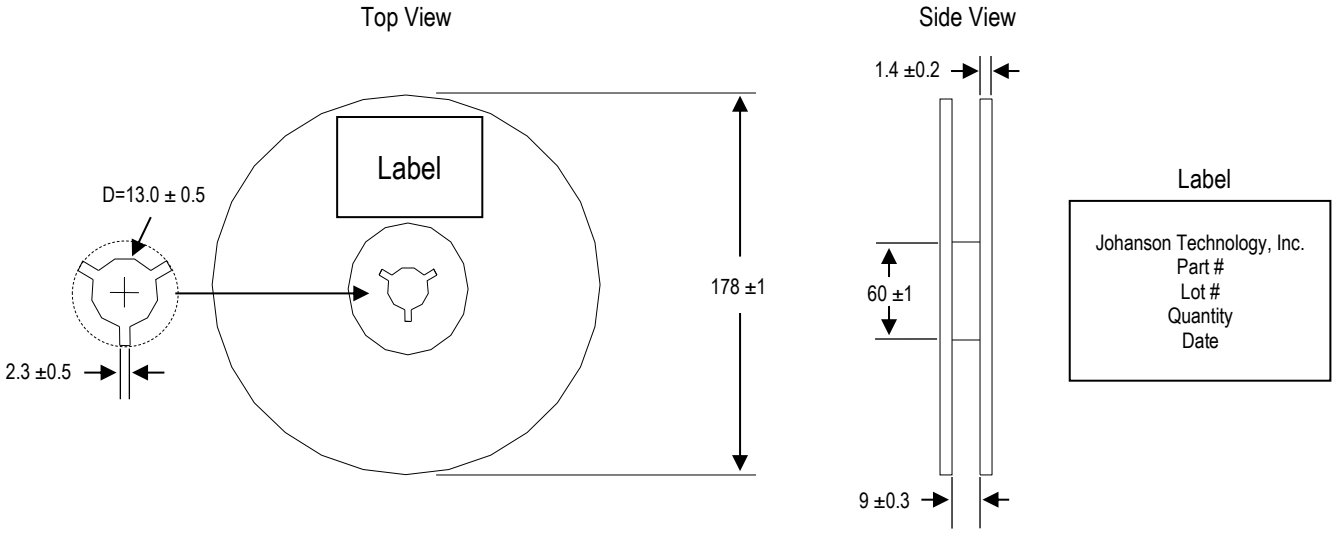
Tape and Reel Specifications (Units in mm)

Tape Dimensions

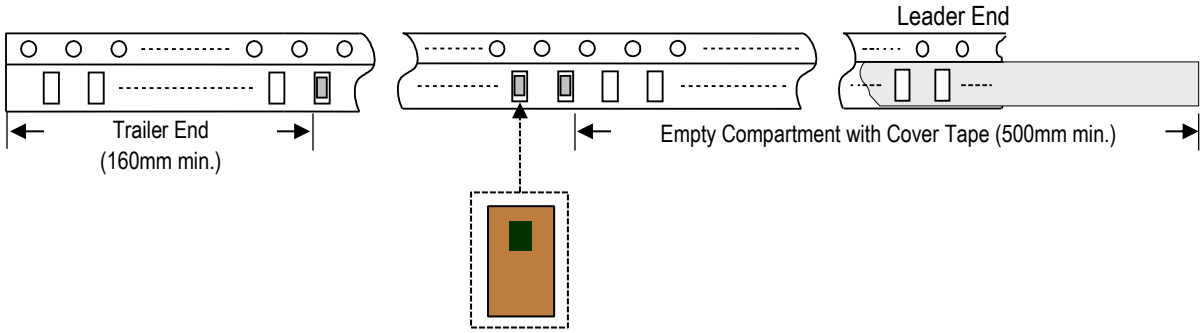


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ±0.1	4.0 ±0.1	1.35 ±0.05	2.15 ±0.05	2.0 ±0.05	3.5 ±0.1	8.0 ±0.1	1.08 ±0.05	4,000pcs.	Plastic (Embossed)

Reel Dimensions



Leader and Trailer Dimensions



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Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	2025LP15A1225001B	Silver
T & R (7" Reel Embossed Tape)	2025LP15A1225001E (Qty: 4,000 pcs./reel)	
Evaluation Board with 2 SMA Connector	2025LP15A1225001CE1	

Important Links

2025LP15A1225001E Product Page

More Low 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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