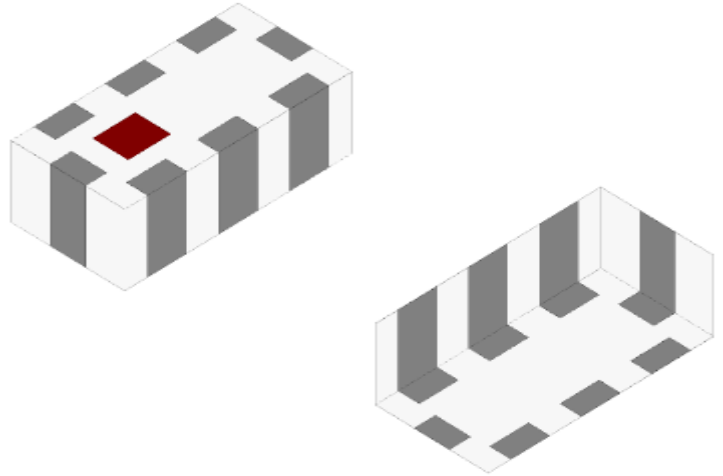


2.45 GHz Low Pass Filter

- 2400 - 2500 MHz pass band
- Fit for 2.4 – 2.5 GHz wireless communication systems such as DECT phones, WLAN cards, Bluetooth modules, etc.
- SMD, EIA 0805 (2.0 x 1.25 x 0.95mm)
- 3W Max. power rating
- RoHS compliant



General Specifications^{1 2}

Insertion Loss (dB)	2400 – 2500 MHz	0.5 Max.
Return Loss (dB)	2400 – 2500 MHz	10.88 Min.
Attenuation (dB)	4800 – 5000 MHz	32 Min.
	7200 – 7500 MHz	30 Min.
	9600 – 10000 MHz	30 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.

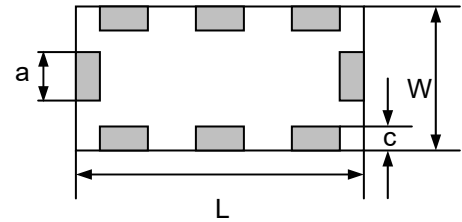
¹ Typical value represents average measurement at 25°C. Min./Max. values represent measurements over specified operating temperature.

² General specifications measured on Johanson's evaluation board P/N 2450LP15B0050001CE1.

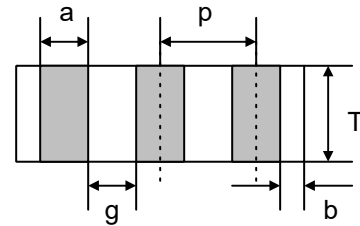
Mechanical Dimensions

	Inches			Millimeters		
L	0.079	±	0.004	2.00	±	0.10
W	0.049	±	0.004	1.25	±	0.10
T	0.037	±	0.004	0.95	±	0.10
a	0.012	±	0.004	0.30	±	0.10
b	0.008	±	0.004	0.2	±	0.10
c	0.012	+0.004/-0.008		0.30	+0.1/-0.2	
g	0.014	±	0.004	0.35	±	0.10
p	0.026	±	0.002	0.65	±	0.05

Bottom view



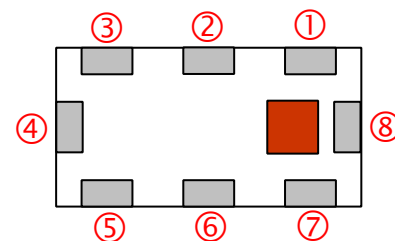
Side view



Terminal Configuration³

Pin Number	Function
1	GND
2	NC
3	GND
4	INPUT / OUTPUT
5	GND
6	NC
7	GND
8	INPUT / OUTPUT

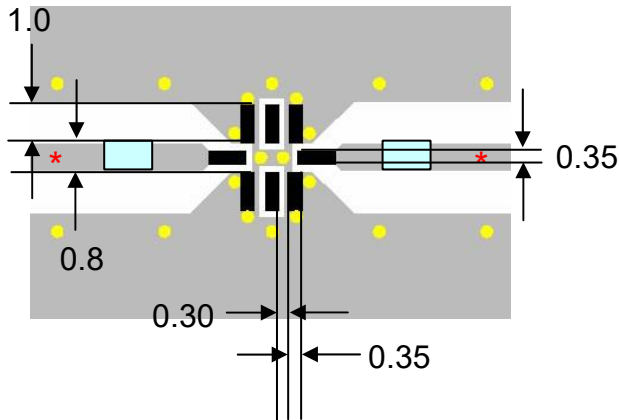
Top view







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

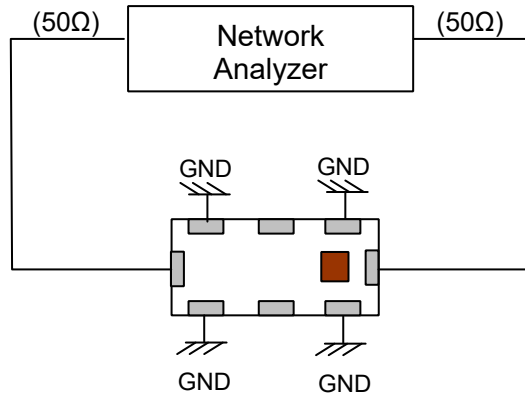
-  Solder Resist
-  Land
-  Through-hole (0.3)
-  DC Blocking Capacitor

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

* DC Blocking capacitor is connected in series at each In/Out Port.

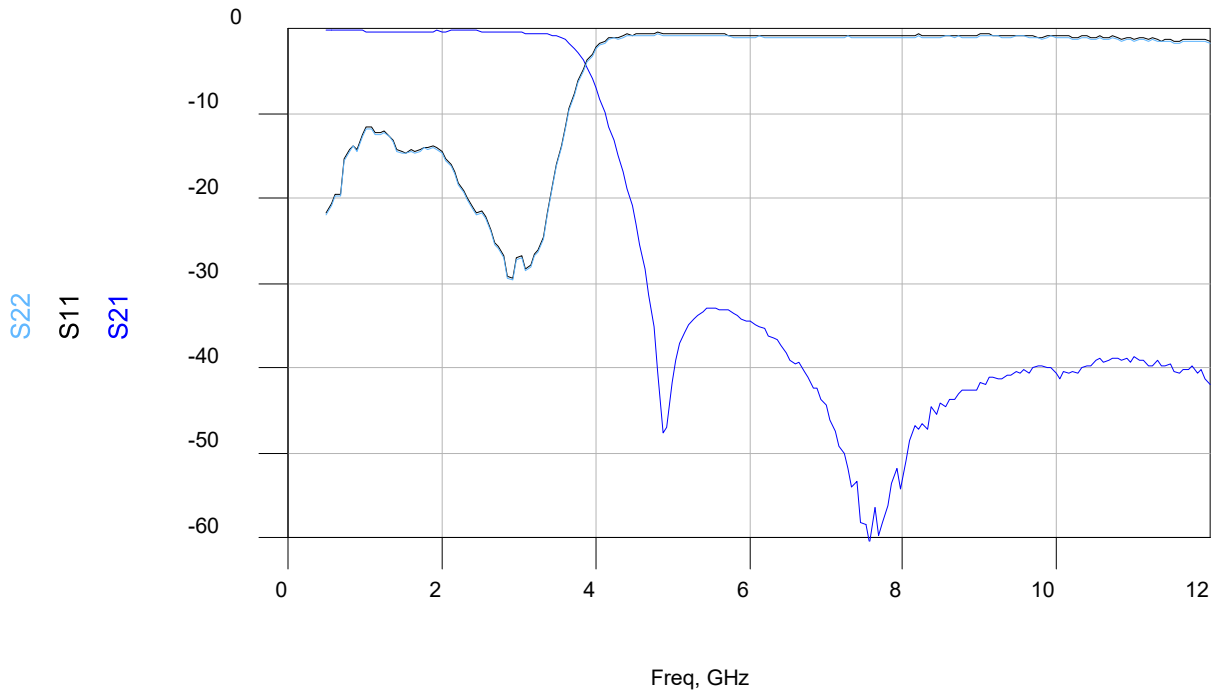
If you'd like the CAD PCB layout or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

Measuring Diagram



RF Measurement (T = 25°C)

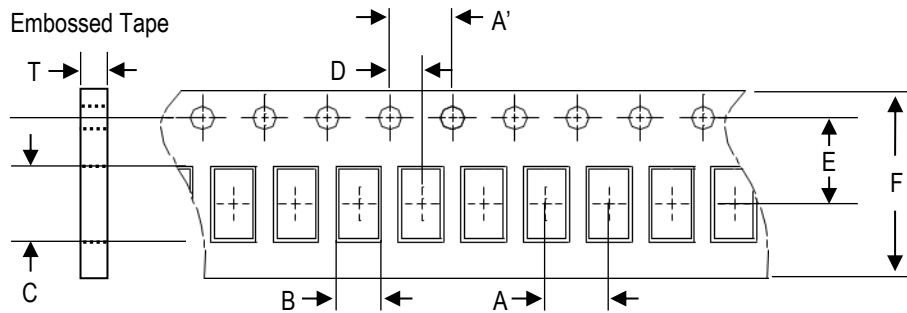
Insertion Loss, Return Loss



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

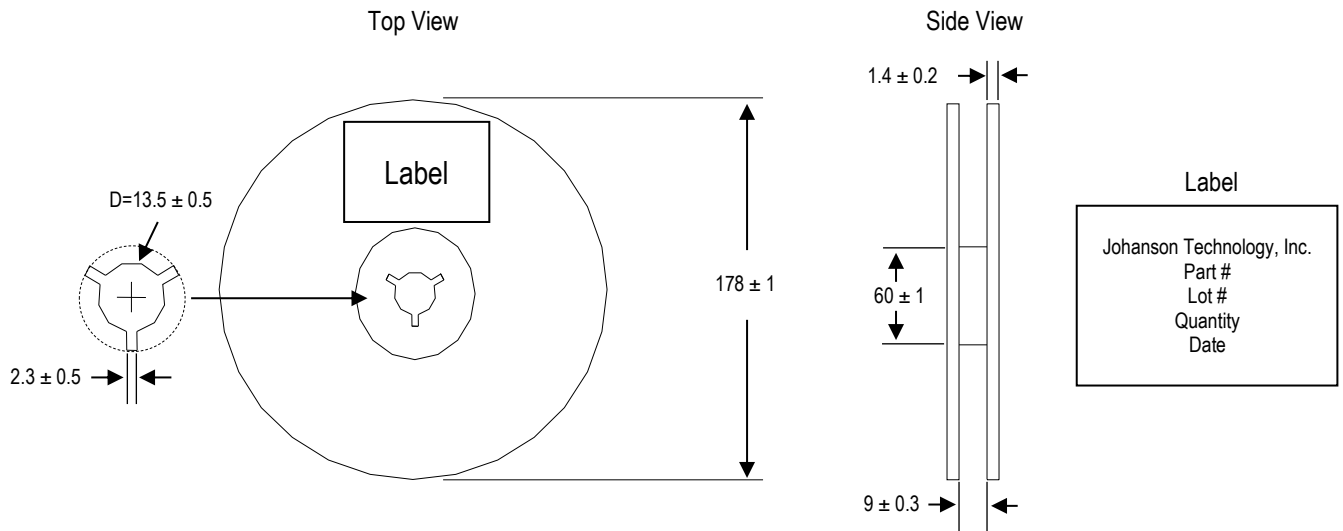
Tape and Reel Specification (Units in mm)

Tape Dimensions

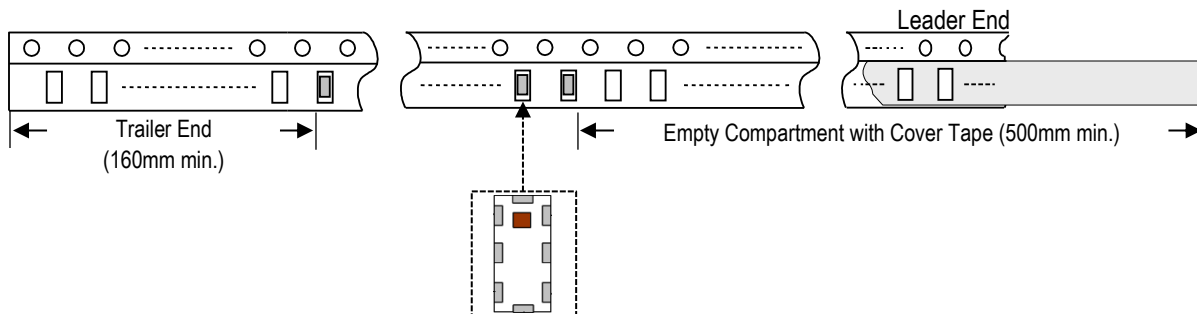


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0±0.1	4.0±0.1	1.35±0.05	2.15±0.05	2.0±0.05	3.5±0.1	8.0±0.1	1.08±0.05	4,000pcs.	Plastic (Embossed)

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	2450LP15B0050001B	Nickel Tin
T & R (7" Reel Embossed Tape)	2450LP15B0050001E (Qty: 4,000 pcs/reel)	
Evaluation Board with 2 SMA Connectors	2450LP15B0050001CE1	

Important Links

[2450LP15B0050001E 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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