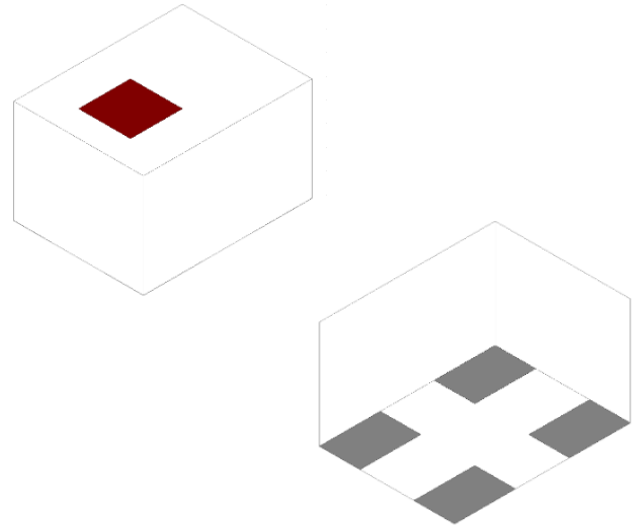


2.45 GHz Micro Low Pass Filter

- 2400 - 2500 MHz passband
- Fit for 2.4 – 2.5 GHz wireless communication systems such as DECT phones, WLAN cards, Bluetooth modules, etc.
- 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)	2400 - 2500 MHz	0.45 Max.
Return Loss (dB)	2400 - 2500 MHz	10 Min.
Attenuation (dB)	4800 - 5000 MHz	35 Min.
	7200 - 7500 MHz	35 Min.

Maximum Ratings

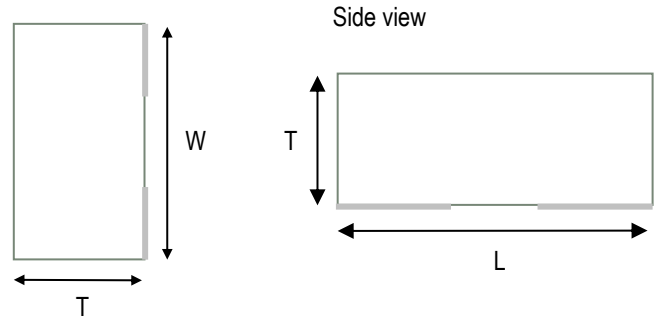
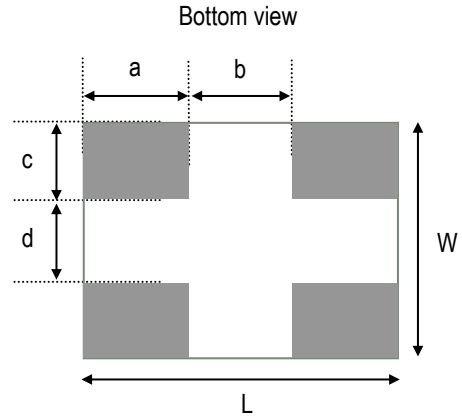
Power Capacity (W)	3 Max. (CW)
Operating Temperature (°C)	-40 to +85
Recommended Storage Conditions post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

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 2450LP05A0100001CE1.

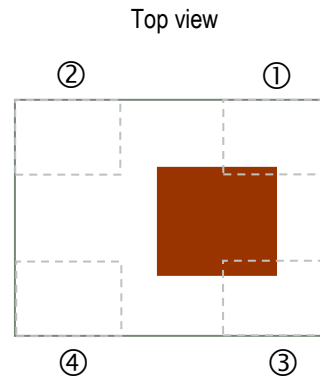
Mechanical Dimensions

	Inches			Millimeters		
L	0.026	±	0.002	0.65	±	0.05
W	0.020	±	0.002	0.50	±	0.05
T	0.016	±	0.002	0.40	±	0.05
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

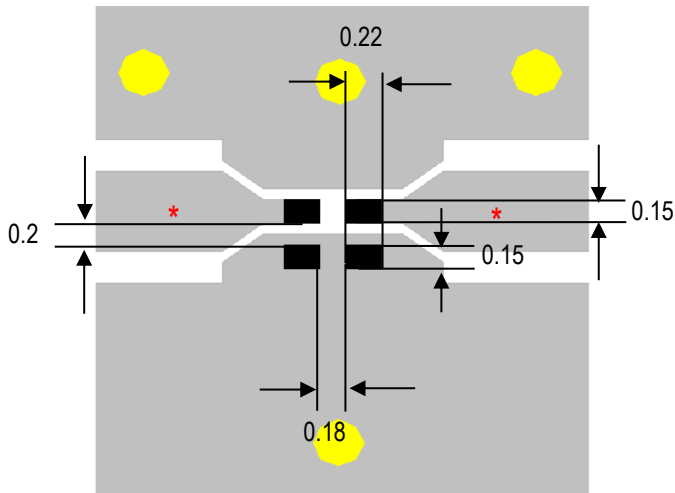
Pin Number	Function
1	INPUT/OUTPUT
2	OUTPUT/INPUT
3	GND
4	GND



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.



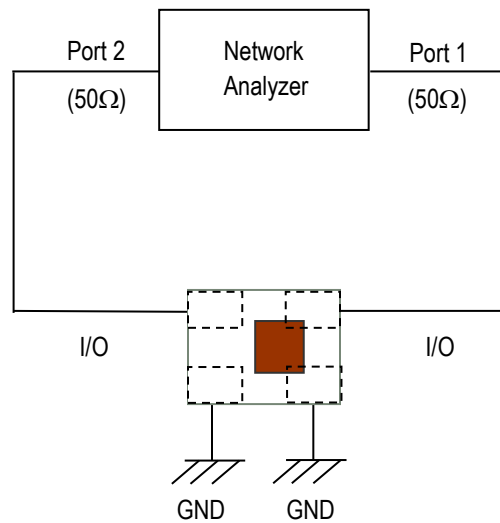
Units in mm

- Solder Resist
- Land
- Through-hole (φ 0.15/0.35)

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

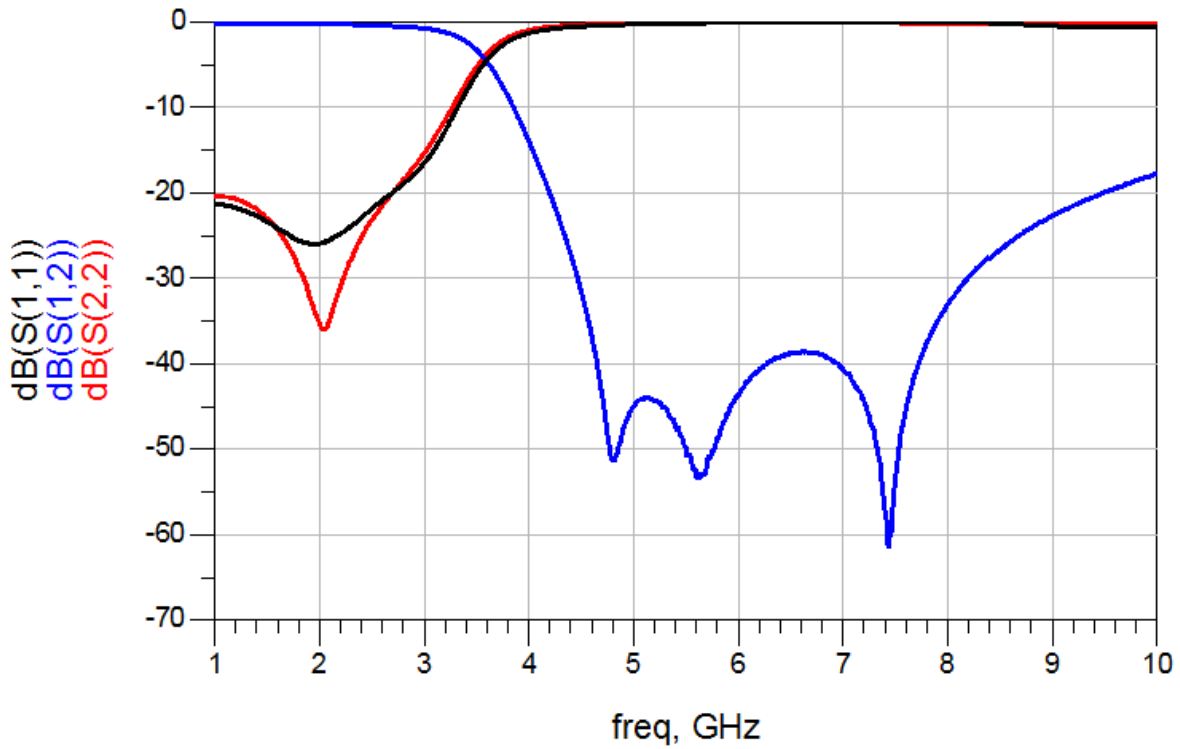
If you'd like the CAD PCB layout or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

Measuring Diagram



RF Measurement (T = 25°C)

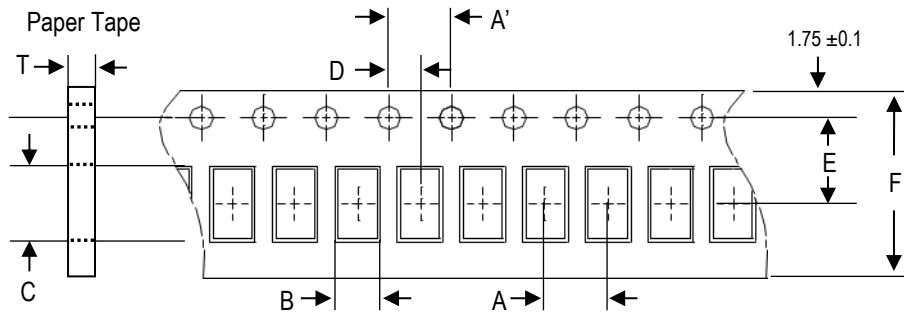
Insertion Loss, Return Loss



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

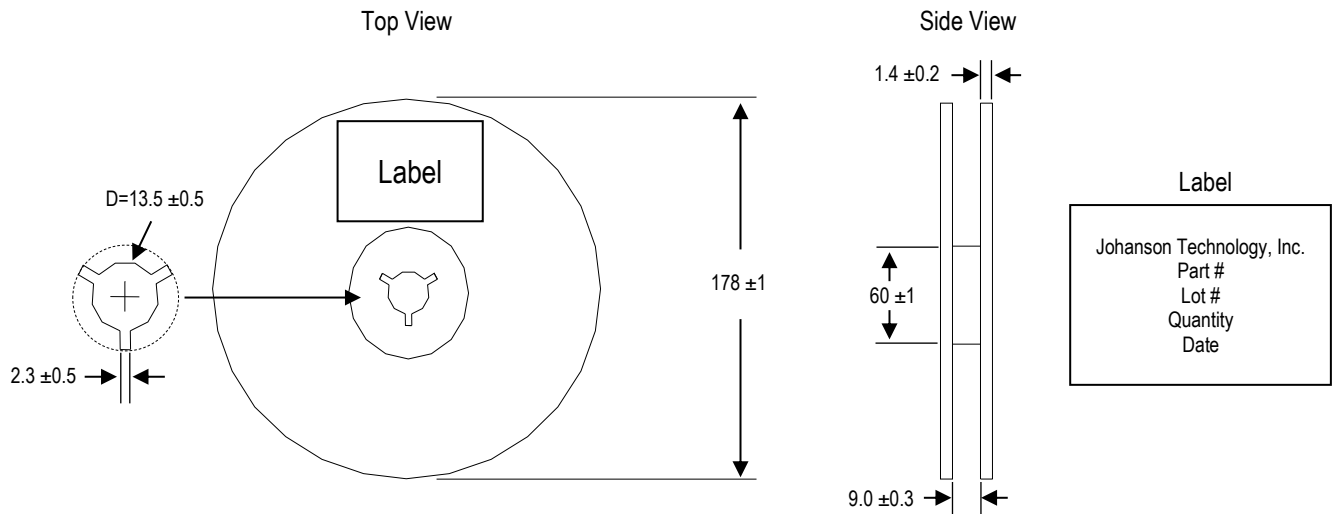
Tape and Reel Specification (Units in mm)

Tape Dimensions

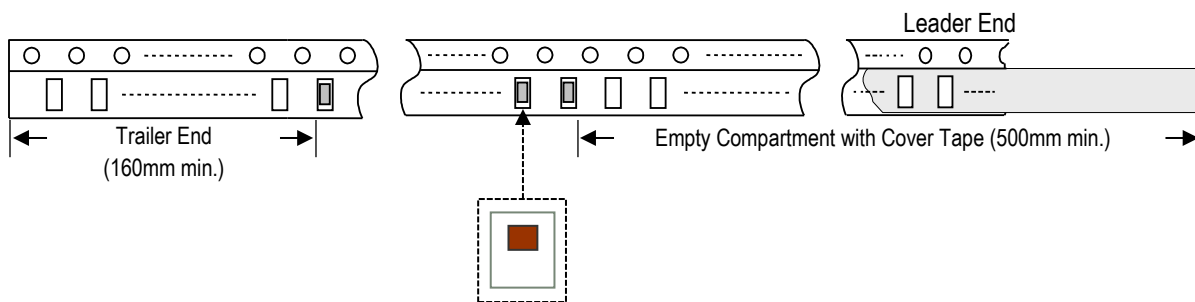


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
2.0 ±0.05	4.0 ±0.1	0.58 ±0.03	0.78 ±0.03	2.0 ±0.05	3.5 ±0.05	8.0 ±0.2	0.45 ±0.03	10,000 pcs.	Paper

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	2450LP05A0100001B	Nickel Tin
T & R (7" Reel Paper Tape)	2450LP05A0100001T (Qty: 10,000 pcs/reel)	
Evaluation Board with 2 SMA Connectors	2450LP05A0100001CE1	

Important Links

[2450LP05A0100001T 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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