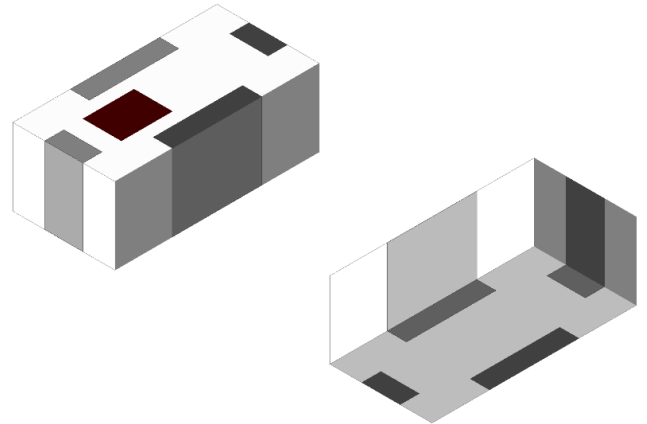


2.45 GHz Low Pass Filter

- 2400 - 2500 MHz pass band
- Optimal for Bluetooth, WiFi, Zigbee, ANT+, Channel Sounding, ISM, MIMO, PDoA, AoA, LoRa, Thread
- SMD, EIA 0402 (1.0 x 0.5 x 0.4 mm)
- 3W Max. power rating
- RoHS compliant



General Specifications^{1 2}

Insertion Loss (dB)	2400 - 2500 MHz	0.4 Typ.	0.7 Max.
Return Loss (dB)	2400 - 2500 MHz	11.0 Typ.	9.5 Min.
Attenuation (dB)	4800 - 5000 MHz		34 Min.
	7200 - 7500 MHz		35 Min.

Maximum Ratings

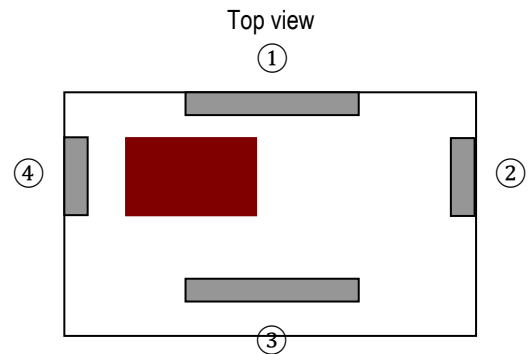
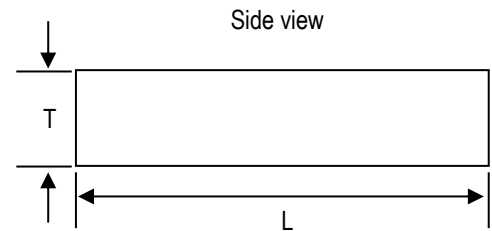
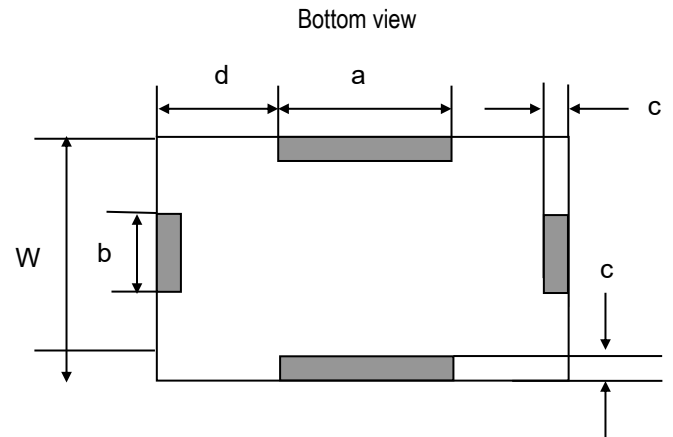
Power Capacity (W)	3 Max. (CW)
Operating Temperature (°C)	-40 to +85
Recommended Storage Conditions post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

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 2450LP07C0100001CE1.

Mechanical Dimensions

	Inches			Millimeters		
L	0.039	±	0.002	1.00	±	0.05
W	0.020	±	0.002	0.50	±	0.05
T	0.016		Max.	0.40		Max.
a	0.012	±	0.004	0.30	±	0.10
b	0.012	±	0.004	0.30	±	0.10
c	0.004	±	0.002	0.10	±	0.05
d	0.014	±	0.004	0.35	±	0.10



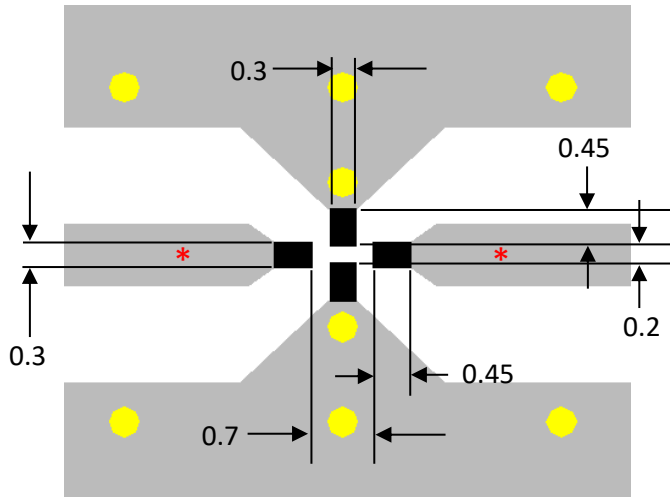
Terminal Configuration³

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




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.



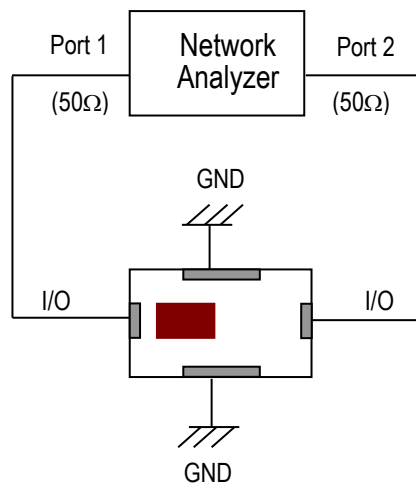
Units in mm

-  Solder Resist
-  Land
-  Through-hole ($\phi 0.35$)

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

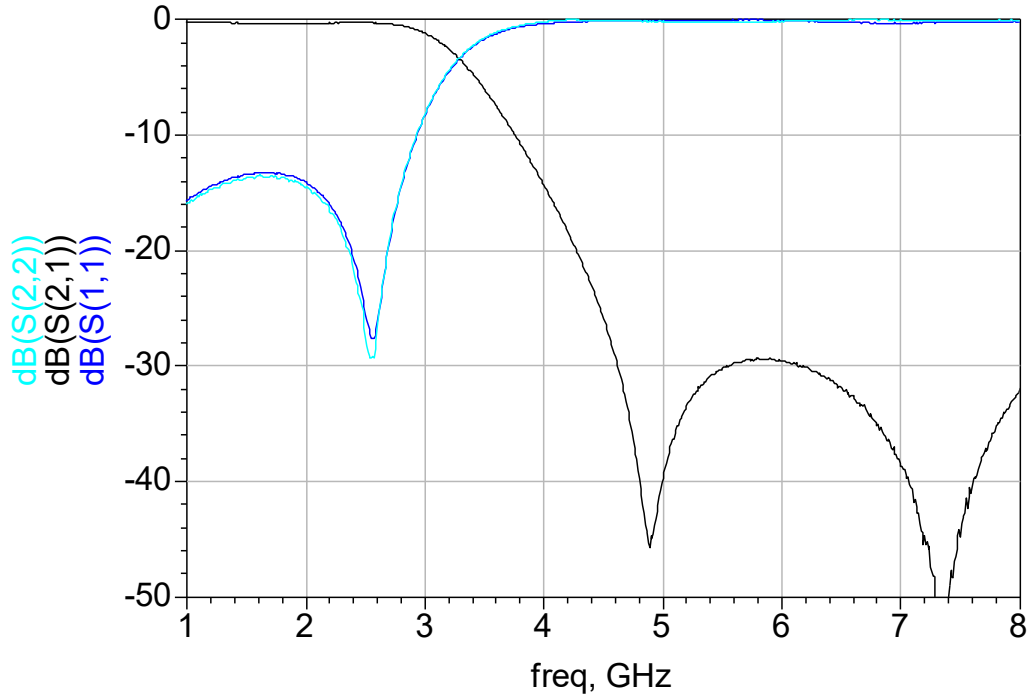
If you'd like the CAD PCB layout or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

Measuring Diagram



RF Measurement (T = 25°C)

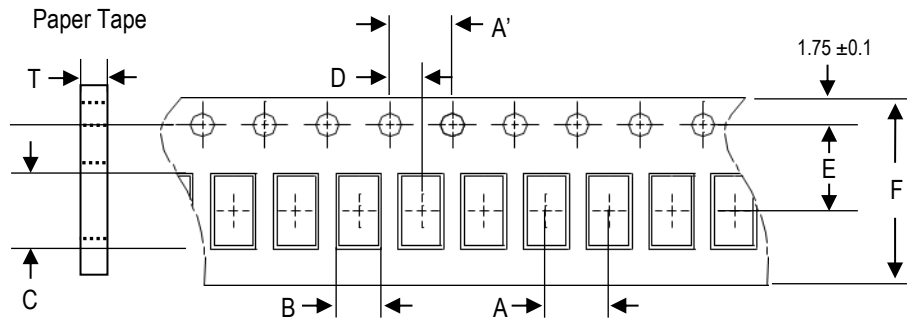
Insertion Loss, Return Loss



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

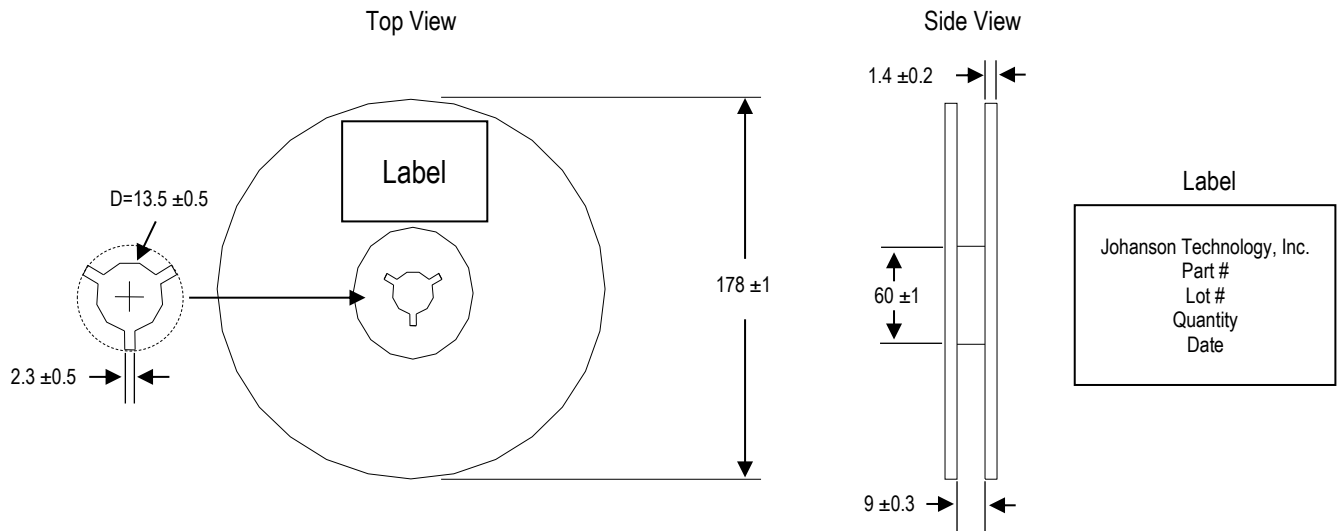
Tape and Reel Specification (Units in mm)

Tape Dimensions

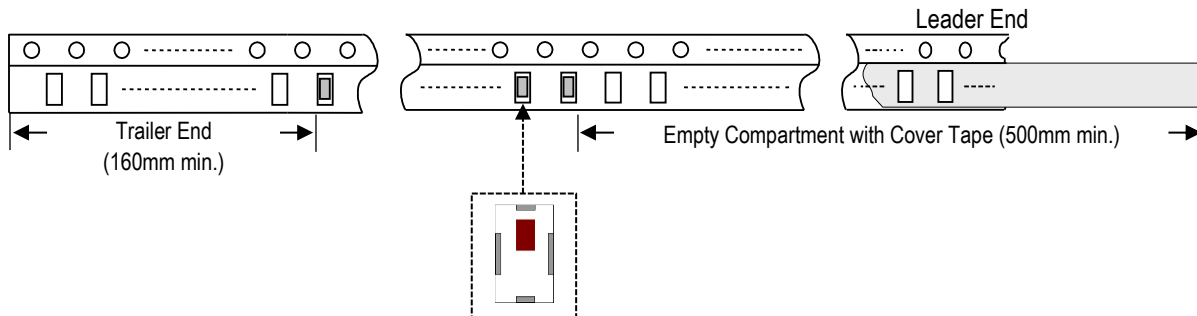


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
2.0 ± 0.05	4.0 ± 0.1	0.62 ± 0.03	1.12 ± 0.03	2.0 ± 0.05	3.5 ± 0.05	8.0 ± 0.1	0.45 ± 0.03	10,000 pcs.	Paper

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	2450LP07C0100001B	Nickel Tin
T & R (7" Reel Paper Tape)	2450LP07C0100001T (Qty: 10,000 pcs/reel)	
Evaluation Board with 2 SMA Connectors	2450LP07C0100001CE1	

Important Links

[2450LP07C0100001T 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](#)

**Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.**