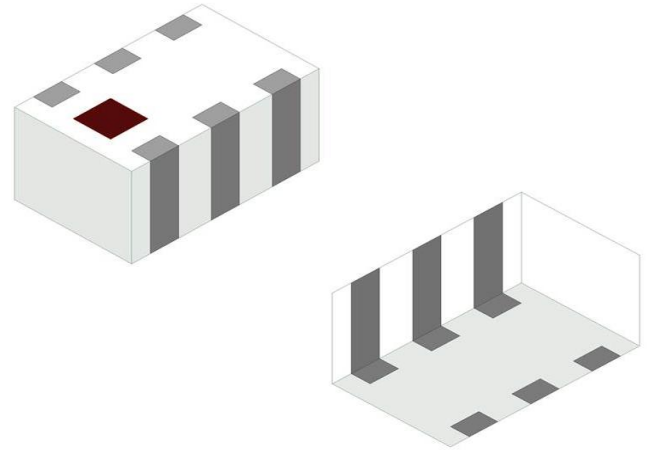


2.45 GHz High Pass Filter

- 2.4 - 2.5 GHz passband
- Fit for wireless communication systems: Bluetooth, WiFi, Zigbee, etc.
- SMD, EIA 0603
- RoHS compliant



General Specifications^{1 2}

Insertion Loss (dB)	2400 - 2500 MHz	1.3 Max.
Return Loss (dB)	2400 - 2500 MHz	14 Min.
Attenuation (dB)	1917 MHz	20 Min.

Maximum Ratings

Power Capacity (W)	2 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.

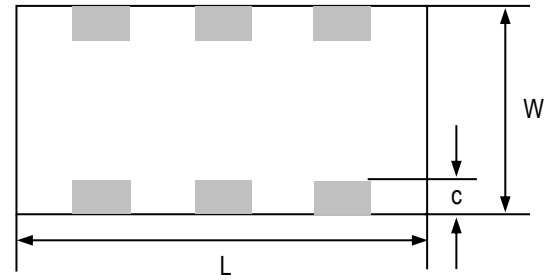
¹ Typical value represents average measurement at 25°C. Min./Max. values represent measurements over specified operating temperature.

² General specifications measured on Johanson's evaluation board PN 2450HP14A0100001CE1.

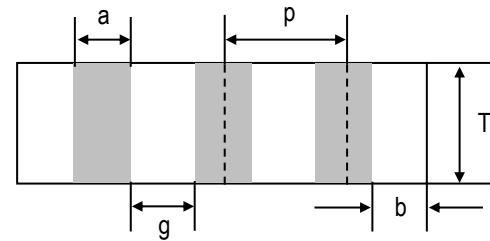
Mechanical Dimensions

	Inches			Millimeters		
L	0.063	±	0.004	1.60	±	0.10
W	0.031	±	0.004	0.80	±	0.10
T	0.022	±	0.004	0.55	±	0.10
a	0.008	±	0.004	0.20	±	0.10
b	0.008	+0.004/-0.006		0.20	+0.10/-0.2	
c	0.006	±	0.004	0.15	±	0.10
g	0.012	±	0.004	0.30	±	0.10
p	0.020	±	0.002	0.50	±	0.05

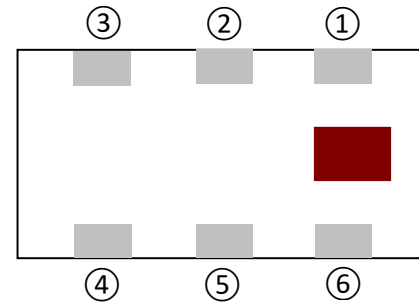
Bottom view



Side view



Top view



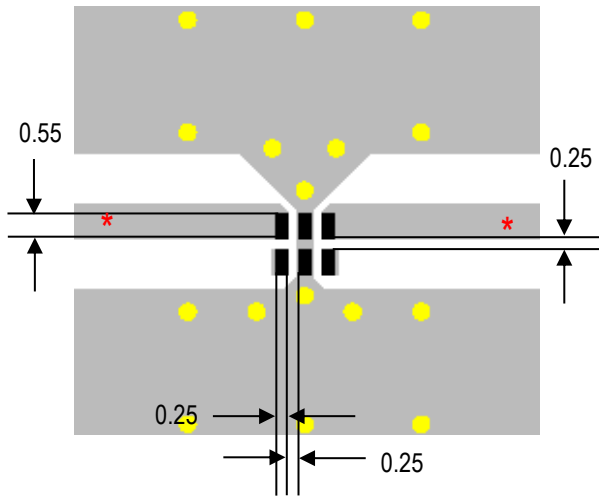
Terminal Configuration³

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




³ The termination type is Nickel Tin. Go to: <https://www.johansontechnology.com/ipcsoldering-profile> for Typical Soldering Profile.

Recommended PCB Layout

Note: Mount device with directional marking facing up.



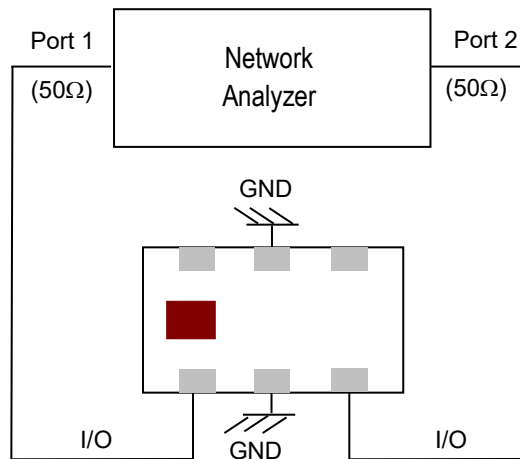
Units in mm

-  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.

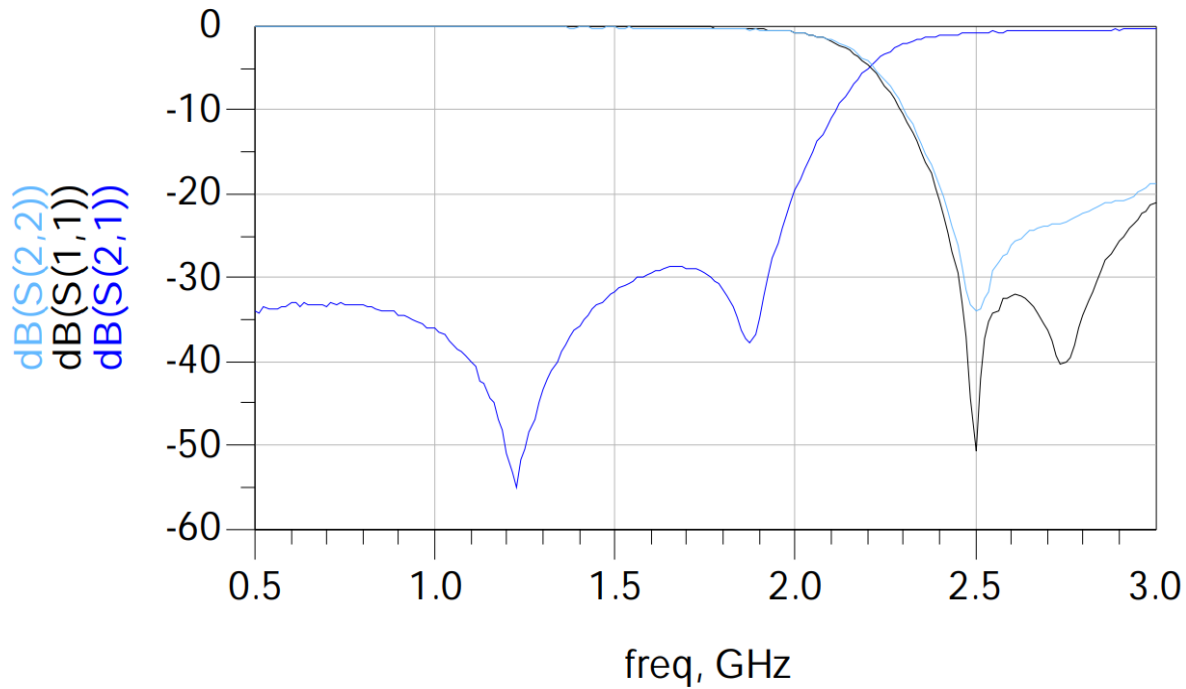
If you'd like the CAD PCB layout or have any questions, contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

Measuring Diagram



RF Measurement (T = 25°C)

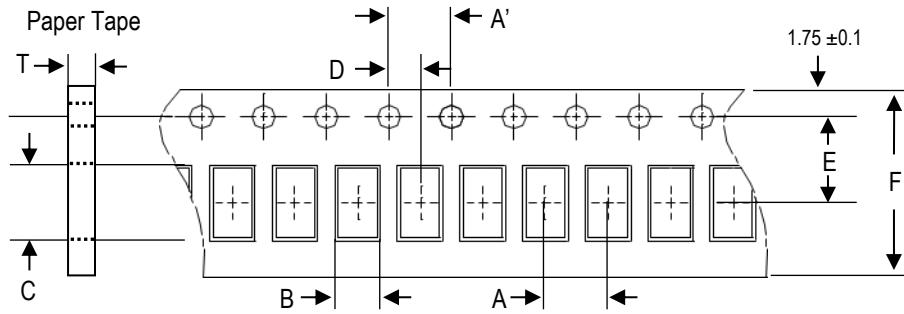
Insertion Loss, Return Loss and Attenuation



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

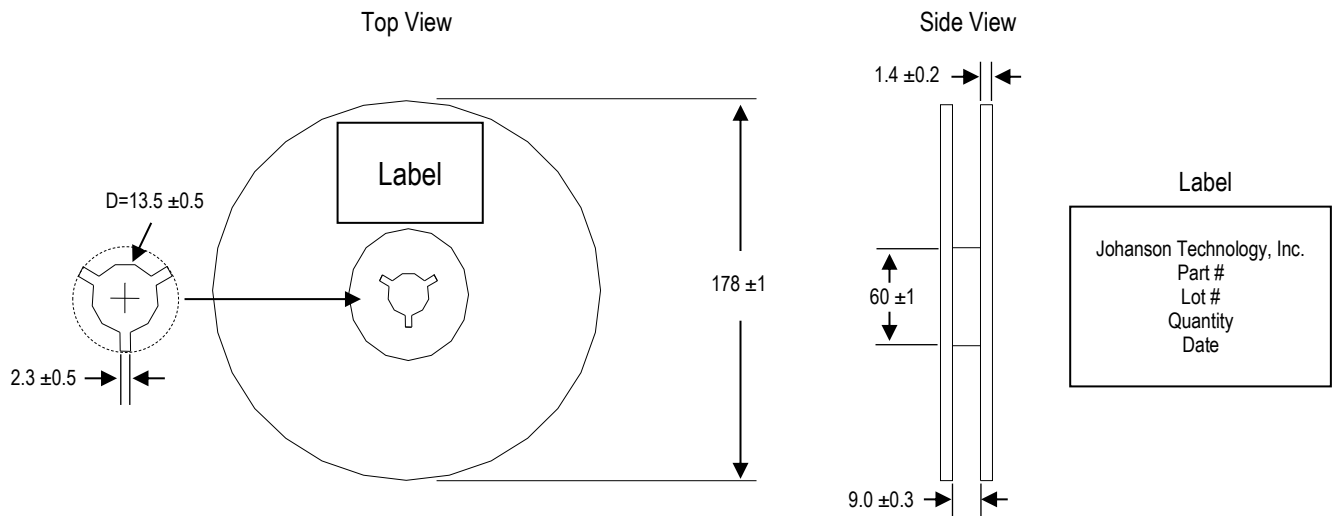
Tape and Reel Specifications (Units in mm)

Tape Dimensions

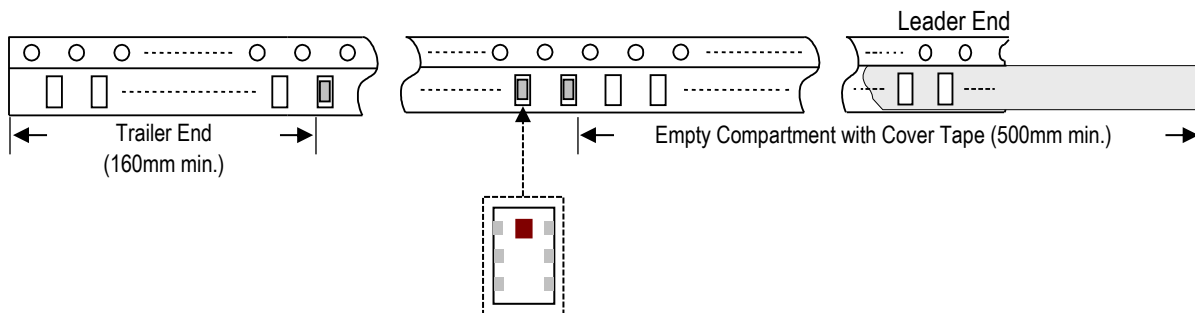


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ±0.1	4.0 ±0.1	1.1 ±0.1	1.92 ±0.1	2.0 ±0.1	3.5 ±0.1	8.0 ±0.1	0.75 ±0.05	4,000 pcs.	Paper

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	2450HP14A0100001B	Nickel Tin
T & R (7" Reel Paper Tape)	2450HP14A0100001T (Qty: 4,000 pcs./reel)	
Evaluation Board with 2 SMA Connector	2450HP14A0100001CE1	

Important Links

[2450HP14A0100001T Product Page](#)

[More High 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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