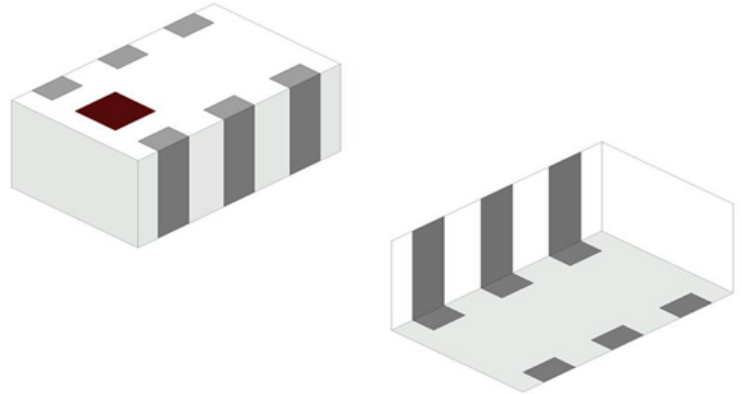


2.5 GHz Low Pass Filter

- 2.3 – 2.7 GHz pass band
- Low insertion loss
- SMD, EIA 0603 (1.6 x 0.8 x 0.6 mm)
- 3W Max. power rating
- RoHS compliant



General Specifications^{1 2}

Insertion Loss (dB)	2300 – 2700 MHz	0.55 Max.
Return Loss (dB)	2300 – 2700 MHz	11.7 Min.
Attenuation (dB)	4600 – 5400 MHz	40 Min.
	6900 – 8100 MHz	25 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.

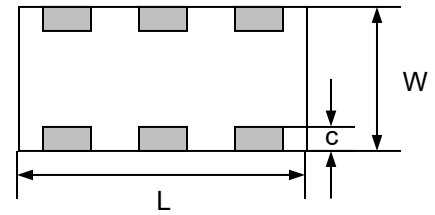
¹ Typical value represents average measurement at 25°C. Min./Max. values represent measurements over specified operating temperature.

² General specifications measured on Johanson's evaluation board PN 2500LP14A0400001CE1.

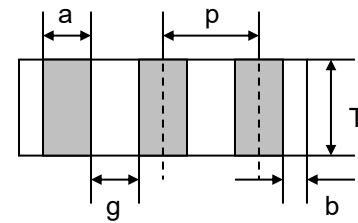
Mechanical Dimensions

	Inches			Millimeters		
L	0.063	±	0.004	1.6	±	0.1
W	0.031	±	0.004	0.8	±	0.1
T	0.024	±	0.004	0.6	±	0.1
a	0.008	±	0.004	0.2	±	0.1
b	0.008	+0.004/-0.006		0.2	+0.1/-0.15	
c	0.006	±	0.004	0.15	±	0.1
g	0.012	±	0.004	0.3	±	0.1
p	0.020	±	0.002	0.50	±	0.05

Bottom view



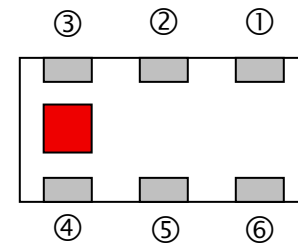
Side view



Terminal Configuration³

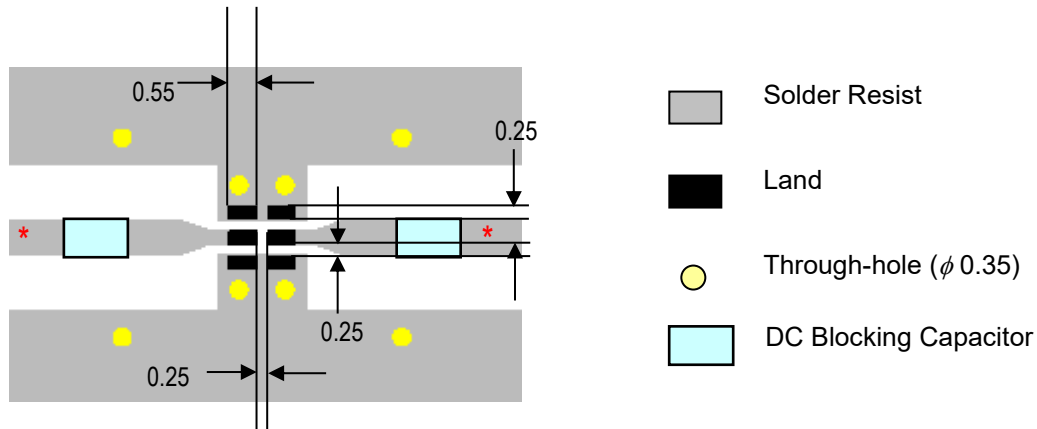
Pin Number	Function
1	GND
2	INPUT / OUTPUT
3	GND
4	GND
5	INPUT / OUTPUT
6	GND

Top view



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

Recommended PCB Layout

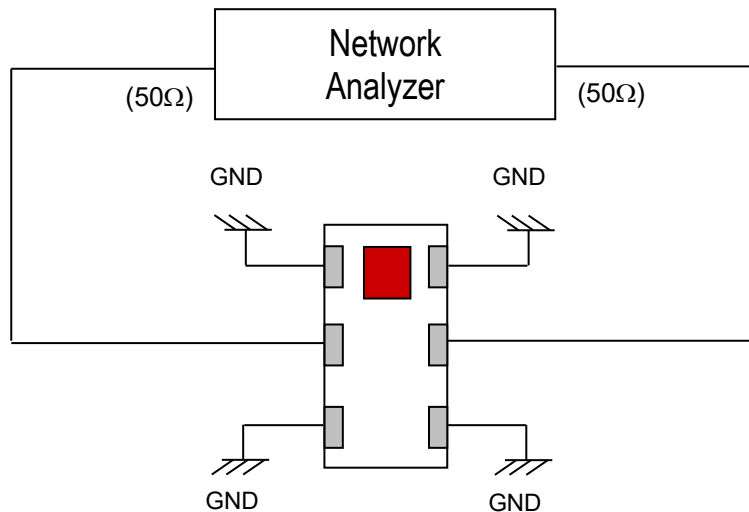


* Transmission line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

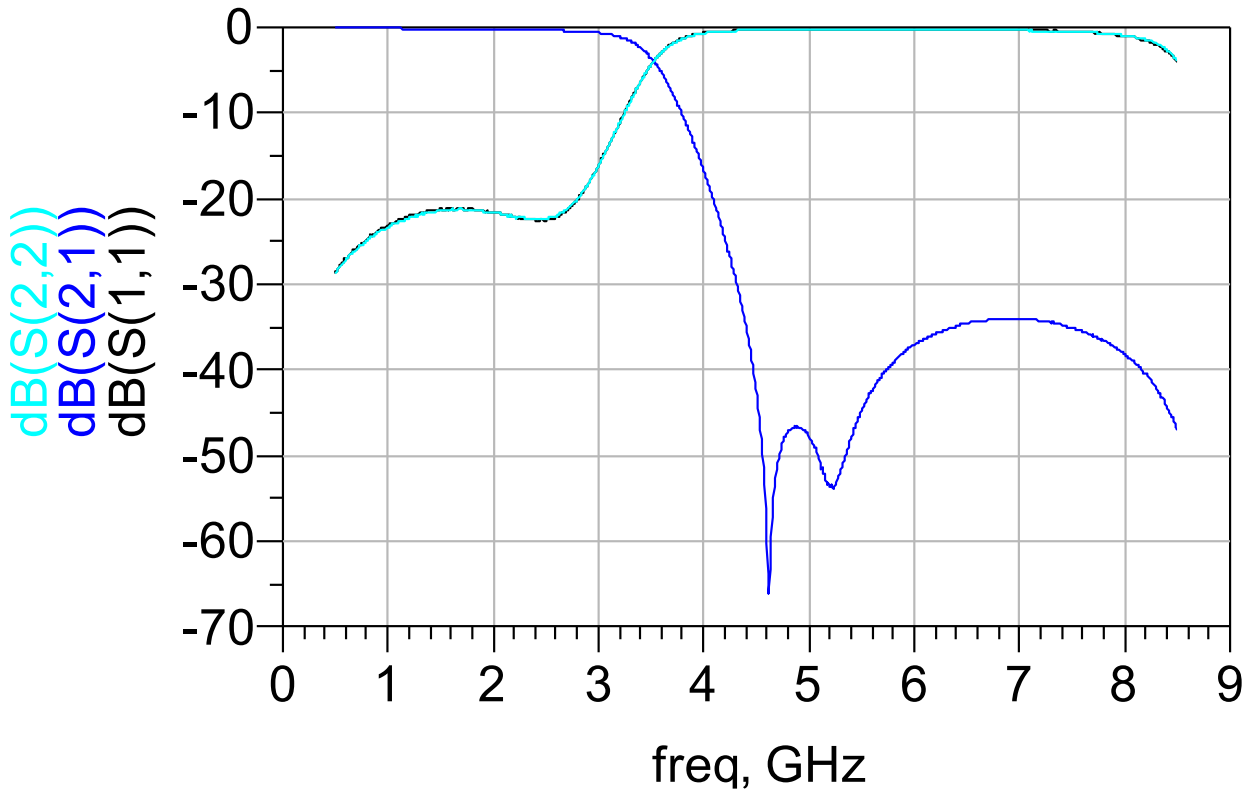
* DC Blocking capacitor is connected in series at each In/Out Port.

If you 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



RF Measurement

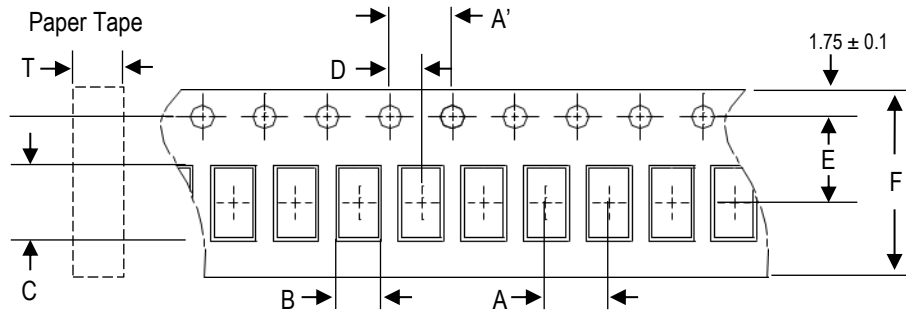


S-parameter and layout files available upon request. Please contact us at <https://www.johansontechnology.com/ask-a-question>



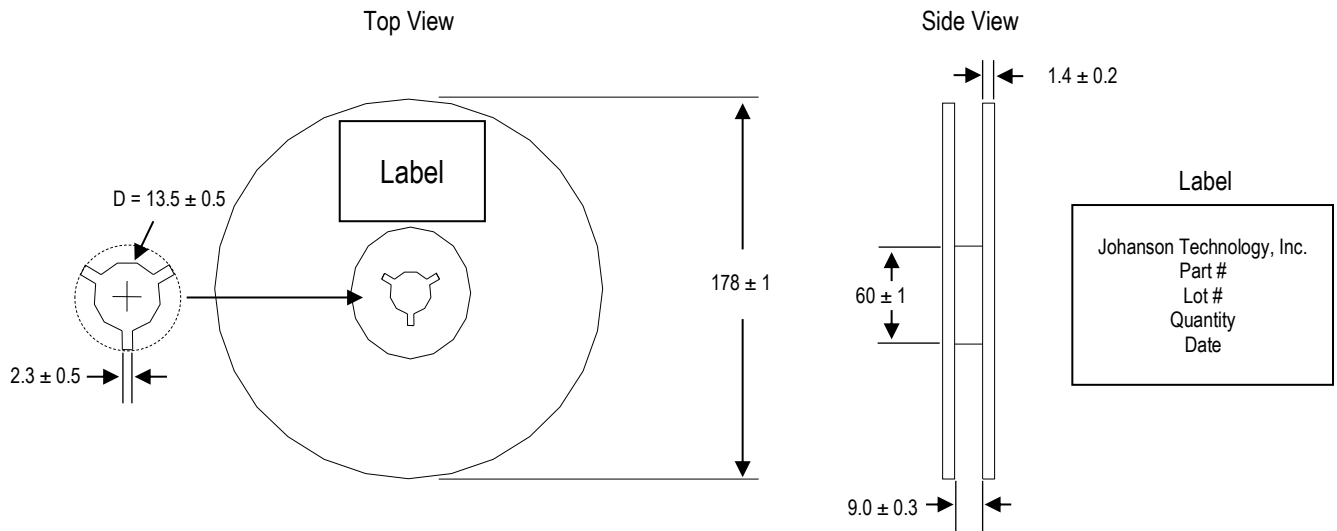
Tape and Reel Specifications (Units in mm)

Tape Dimensions

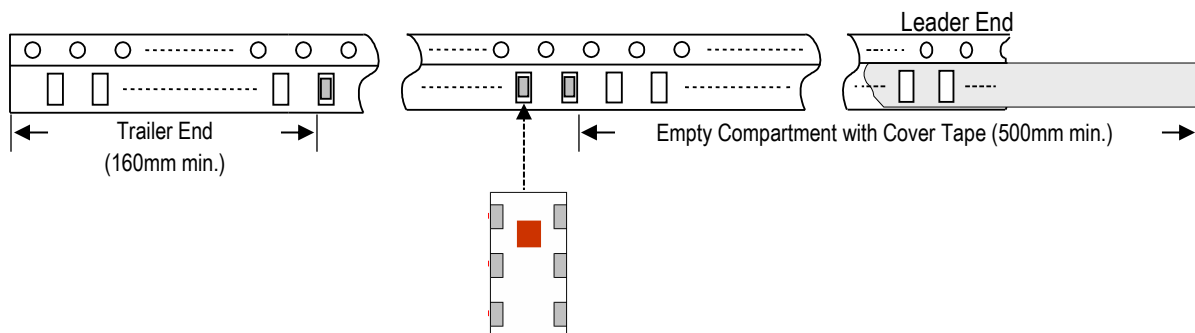


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ± 0.1	4.0 ± 0.1	1.10 ± 0.1	1.92 ± 0.1	2.0 ± 0.1	3.5 ± 0.1	8.0 ± 0.1	0.75 ± 0.05	4,000 pcs	Paper

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	2500LP14A0400001B	Nickel Tin
T & R (7" Reel Paper Tape)	2500LP14A0400001T (Qty: 4,000 pcs./reel)	
Evaluation Board with 2 SMA Connector	2500LP14A0400001CE1	

Important Links

[2500LP14A0400001T 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](#)

Contact our application engineers for a PCB layout review.

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