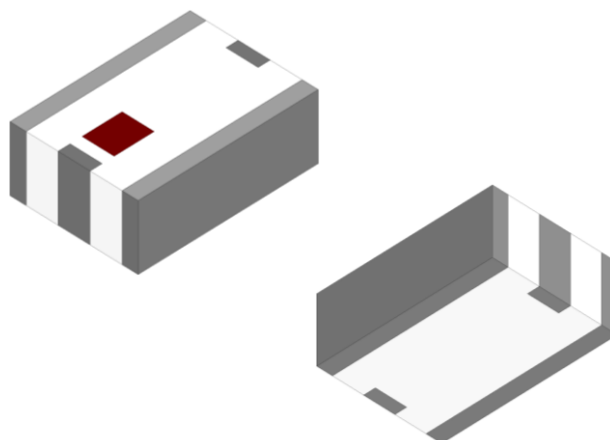




2.15 GHz Band Pass Filter

- 2100 - 2200 MHz passband
- Low insertion loss
- High out-of-band rejection
- SMD, EIA 1008
- RoHS complaint



General Specifications^{1 2}

Insertion Loss (dB)	2100 - 2200 MHz	3.2 Max.
Return Loss (dB)	2100 - 2200 MHz	9.5 Min.
Attenuation (dB)	1950 MHz	18 Min.
	2360 MHz	18 Min.

Maximum Ratings

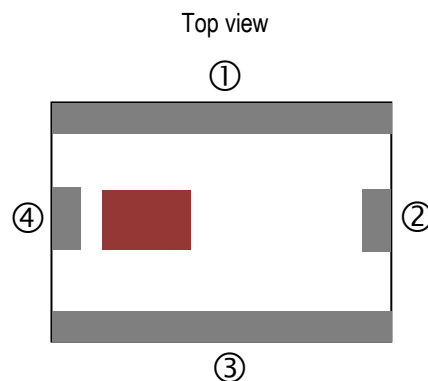
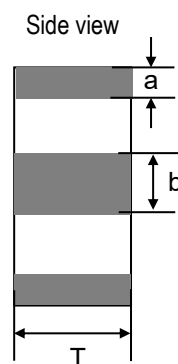
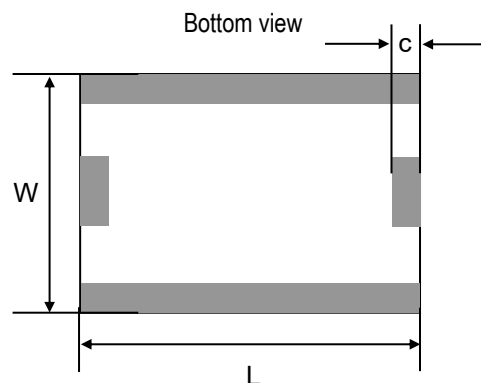
Power Capacity (W)	3 Max. (CW)
Operating Temperature (°C)	-40 to +85
Recommended Storage Conditions post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH
	+5 to +35 °C
	18 Months Max.

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 2150BP39A0100001CE1.

Mechanical Dimensions

	Inches			Millimeters		
L	0.098	±	0.008	2.50	±	0.20
W	0.079	±	0.008	2.00	±	0.20
T	0.035	±	0.004	0.90	±	0.10
a	0.012	±	0.008	0.30	±	0.20
b	0.024	±	0.008	0.60	±	0.20
c	0.012	±	0.008	0.30	±	0.20



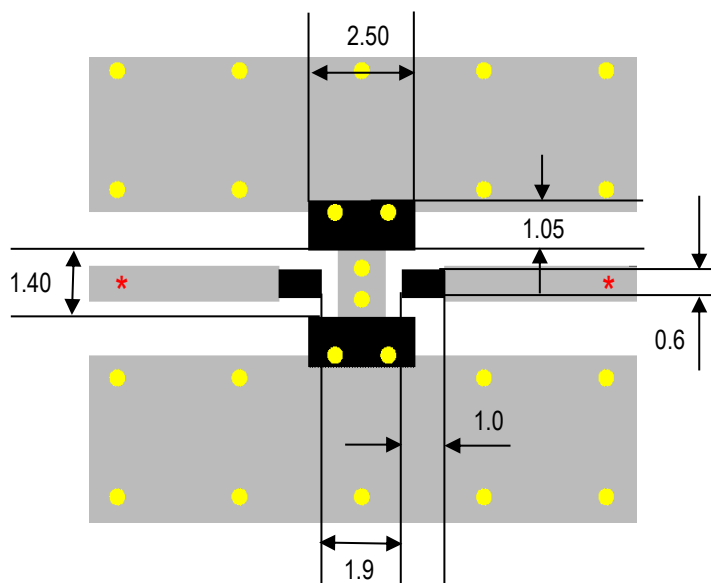
Terminal Configuration³

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 Layout

Note: Mount device with colored mark facing up.



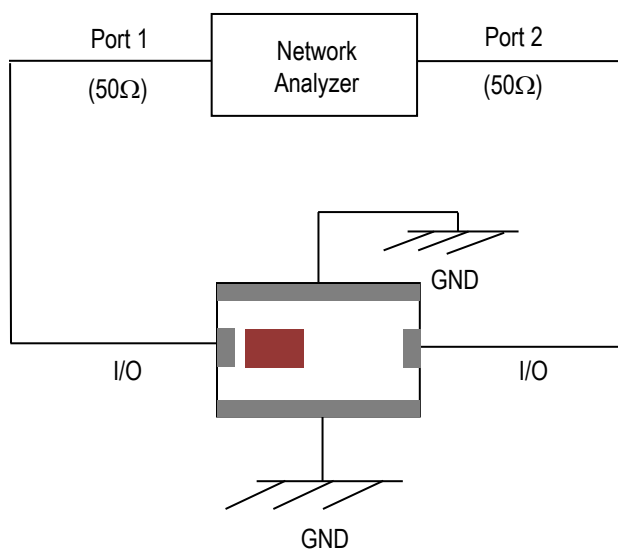
Units in mm

-  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>

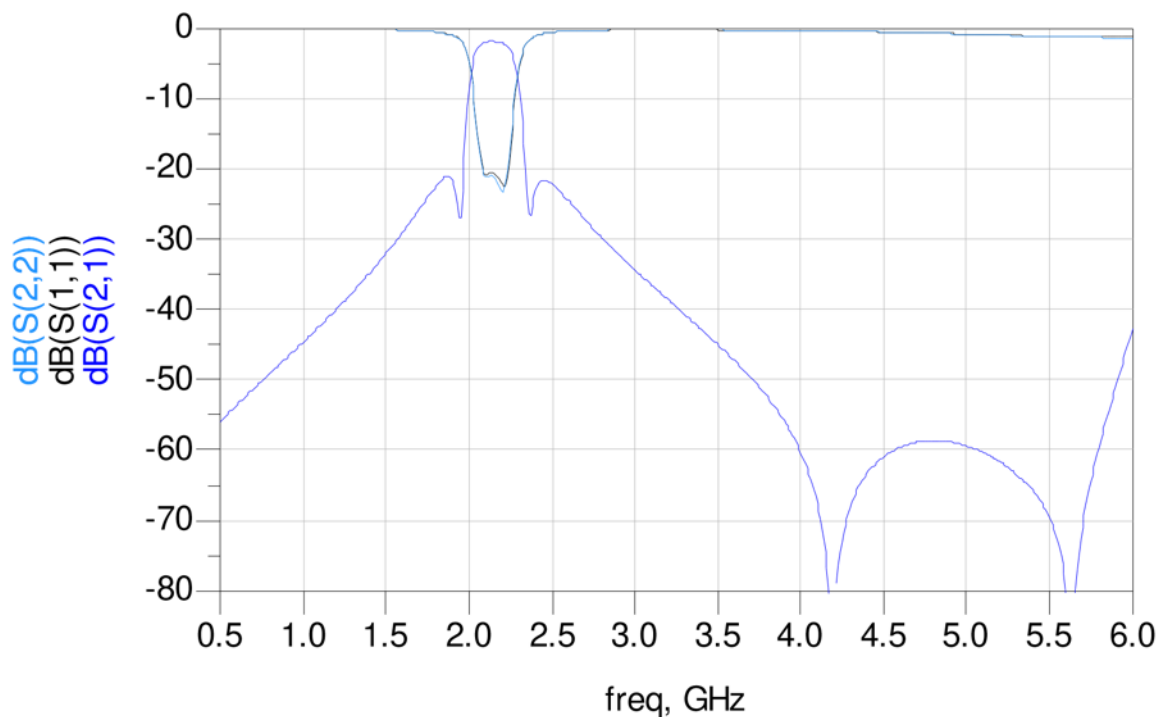
Measuring Diagram





RF Measurement (T = 25°C)

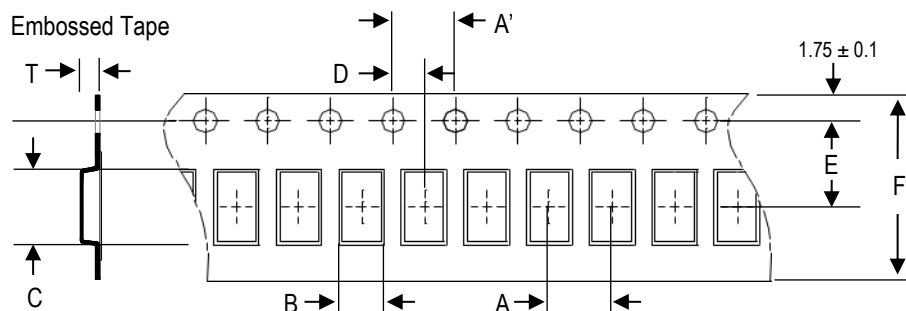
Insertion Loss, Return Loss and Attenuation



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

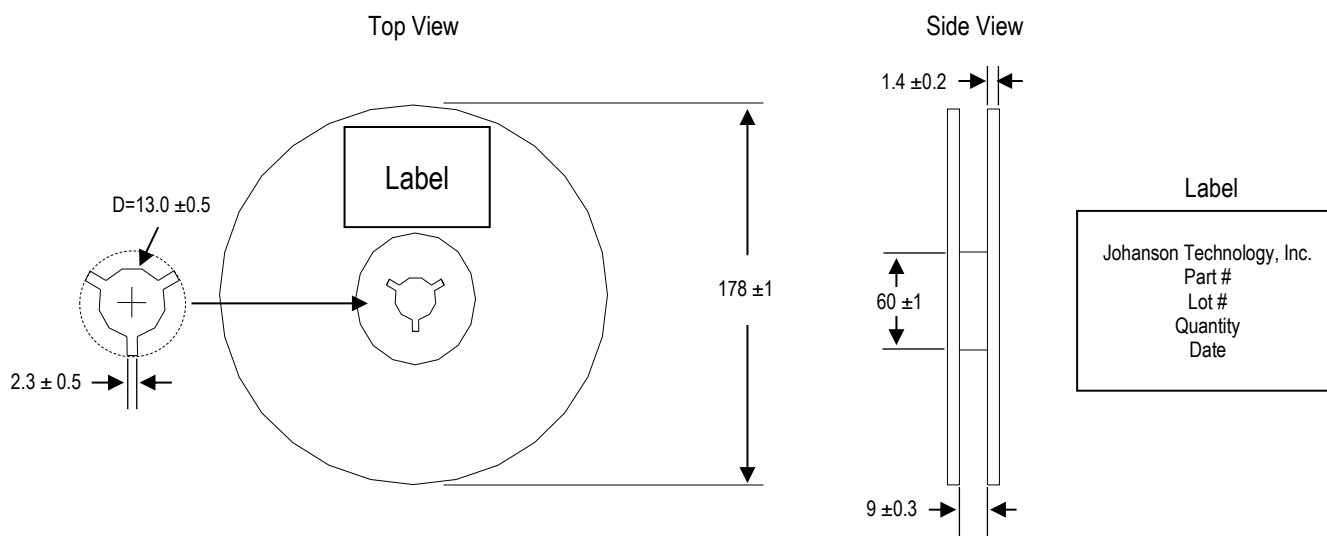
Tape and Reel Specification (Units in mm)

Tape Dimensions

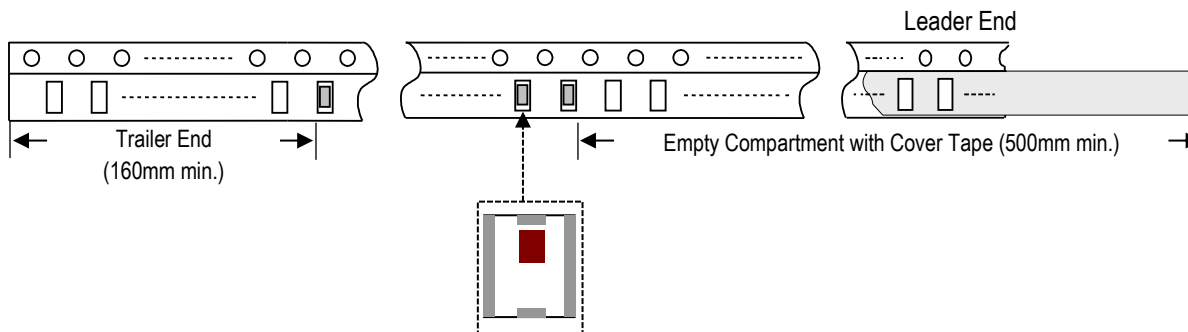


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ± 0.1	4.0 ± 0.1	2.35 ± 0.1	2.8 ± 0.1	2.0 ± 0.1	3.5 ± 0.1	8.0 ± 0.1	1.15 ± 0.1	3,000 pcs.	Plastic (Embossed)

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Number

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	2150BP39A0100001B	Nickel Tin
T & R (7" Reel Embossed Tape)	2150BP39A0100001E (Qty: 3,000 pcs./reel)	
Evaluation Board with 2 SMA Connectors	2150BP39A0100001CE1	

Important Links

[2150BP39A0100001E Product Page](#)

[More Band 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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