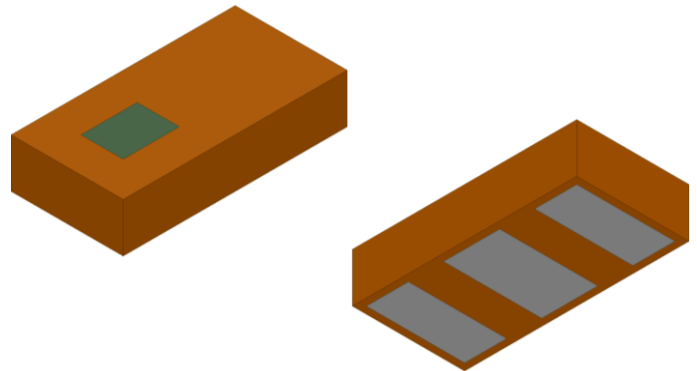


## 3.75 GHz Band Pass Filter

- 3300 - 4200 MHz pass band
- Very low insertion loss and high rejection
- SMD, EIA 0603 case size
- 3W Max. power rating
- RoHS compliant



### General Specifications<sup>1 2</sup>

Insertion Loss (dB)	3300 - 4200 MHz	1.35 Typ.	1.7 Max.
Return Loss (dB)	3300 - 4200 MHz	13 Typ.	10 Min.
Attenuation (dB)	100 - 2570 MHz	47 Typ.	35 Min.
	2170 MHz	49 Typ.	40 Min.
	2620 - 2690 MHz	28 Typ.	25 Min.
	5150 - 5950 MHz	26 Typ.	20 Min.
	6600 - 8400 MHz	35 Typ.	27 Min.
	9900 - 12600 MHz	33 Typ.	27 Min.

### Maximum Ratings

Power Capacity (W)	3 Max. (CW)
Operating Temperature (°C)	-40 to +105
Recommended Storage Conditions post-installation (°C)	-40 to +105
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

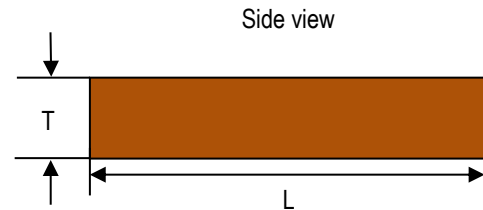
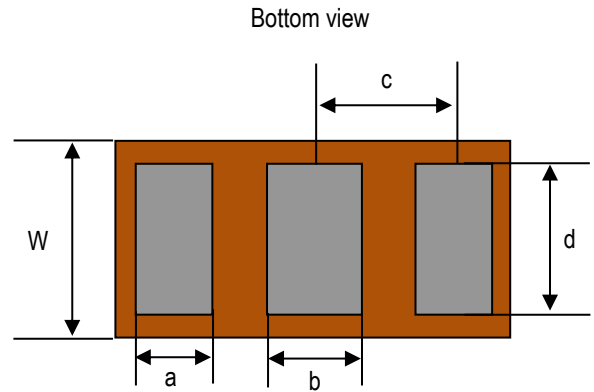
<sup>1</sup> Typical value represents average measurement at 25°C. Min./Max. values represent measurements over specified operating temperature.

<sup>2</sup> General specifications measured on Johanson's evaluation board P/N 3750BP14D0900001CE1.



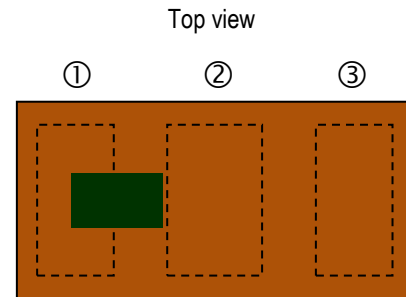
**Mechanical Dimensions**

	Inches			Millimeters		
<b>L</b>	0.063	±	0.004	1.60	±	0.10
<b>W</b>	0.031	±	0.004	0.80	±	0.10
<b>T</b>	0.014		Max.	0.35		Max.
<b>a</b>	0.012	±	0.004	0.30	±	0.10
<b>b</b>	0.016	±	0.004	0.40	±	0.10
<b>c</b>	0.024	±	0.004	0.60	±	0.10
<b>d</b>	0.028	±	0.004	0.70	±	0.10



**Terminal Configuration<sup>3</sup>**

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

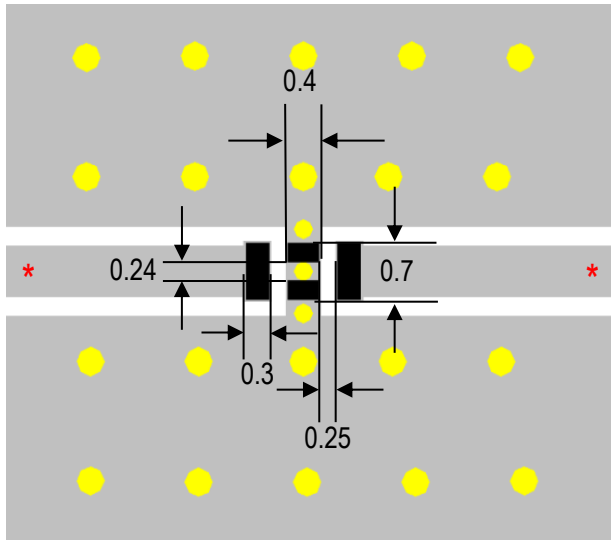


<sup>3</sup> The termination type is Nickel Tin. Go to: <https://www.johansontechnology.com/ipcsoldering-profile> for Typical Soldering Profile.



**Recommended Mounting Configuration**


Note: Mount device with colored mark facing up.



Units in mm

 Solder Resist

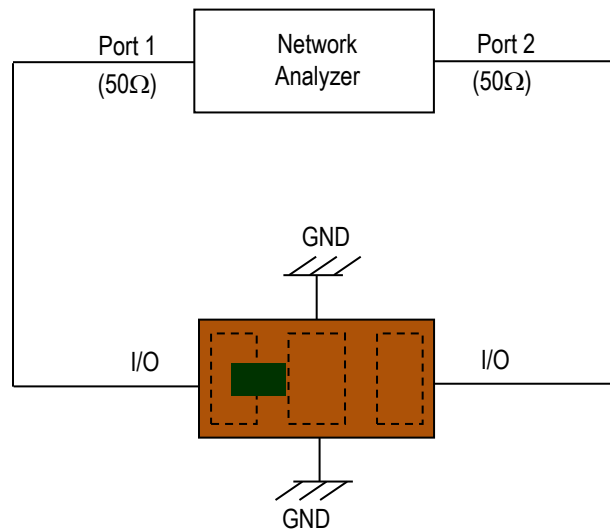
 Land

 Through-hole ( $\phi 0.23$ ,  $\phi 0.35$ )

\* Transmission line width should be designed to match  $50\Omega$  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>

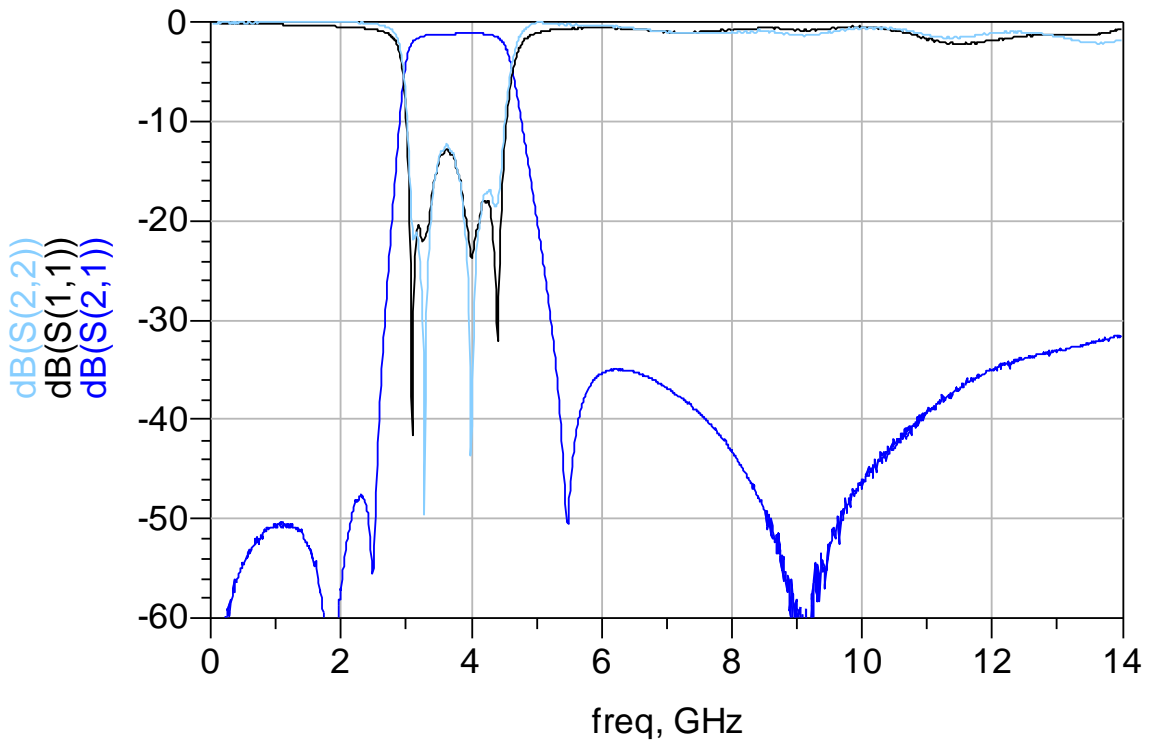
**Measuring Diagram**





**RF Measurement (T = 25°C)**

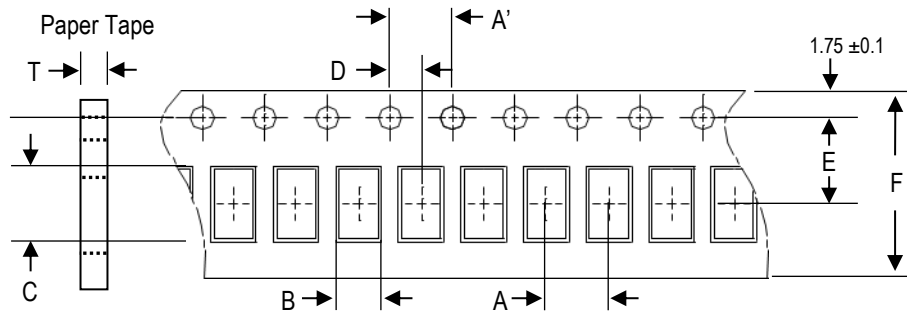
**Insertion Loss, Return Loss**



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

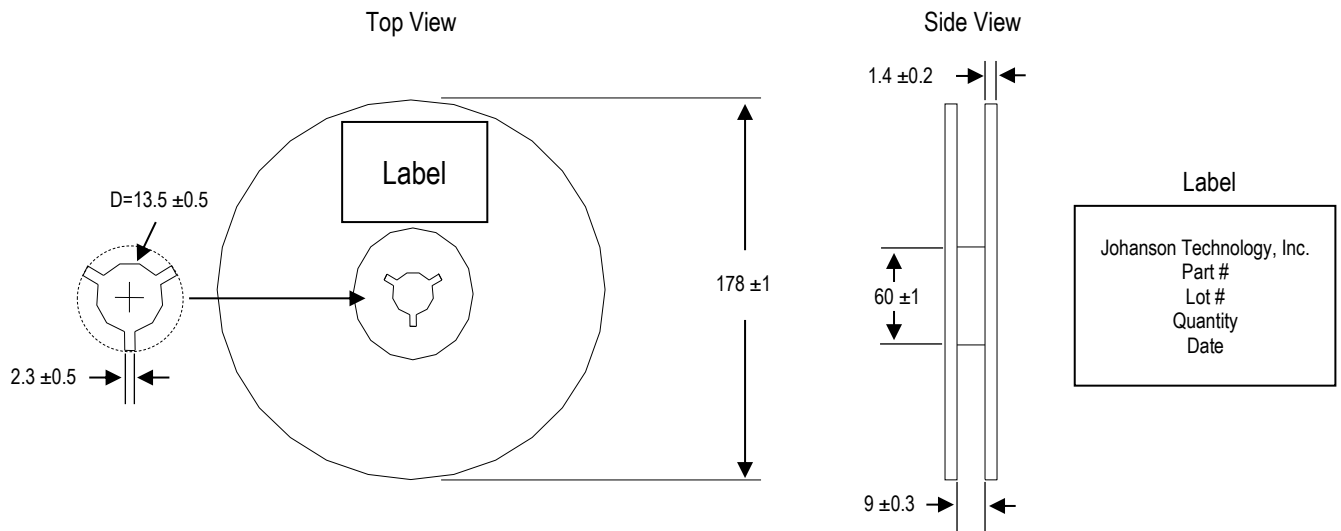
**Tape and Reel Specification (Units in mm)**

**Tape Dimensions**

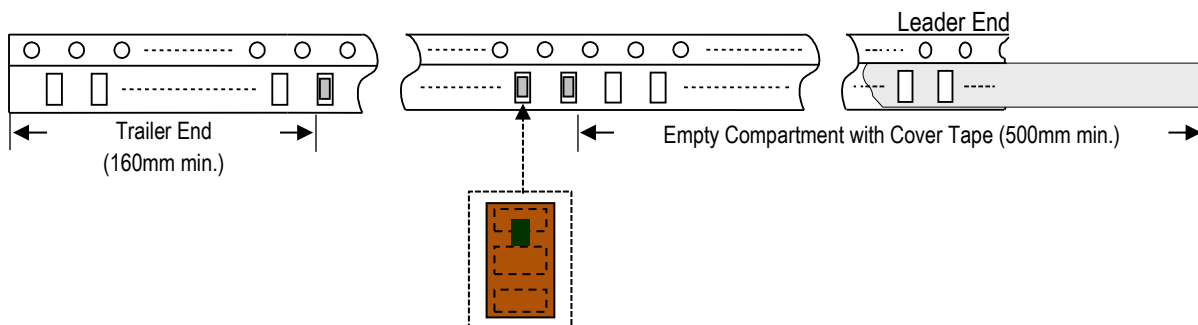


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ± 0.1	4.0 ± 0.1	0.95 ± 0.1	1.8 ± 0.1	2.0 ± 0.1	3.5 ± 0.1	8.0 ± 0.1	0.6 ± 0.03	4,000pcs.	Paper

**Reel Dimensions**



**Leader and Trailer Dimensions**



**Orderable Part Number**

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	3750BP14D0900001B	Nickel Tin
T & R (7" Reel Paper Tape)	3750BP14D0900001T (Qty: 4,000 pcs/reel)	
Evaluation Board with 2 SMA Connectors	3750BP14D0900001CE1	

**Important Links**

[3750BP14D0900001T 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](#)

*Contact our application engineers for a PCB layout review.*

**Johanson Technology, Inc. reserves the right to make design changes without notice.**

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