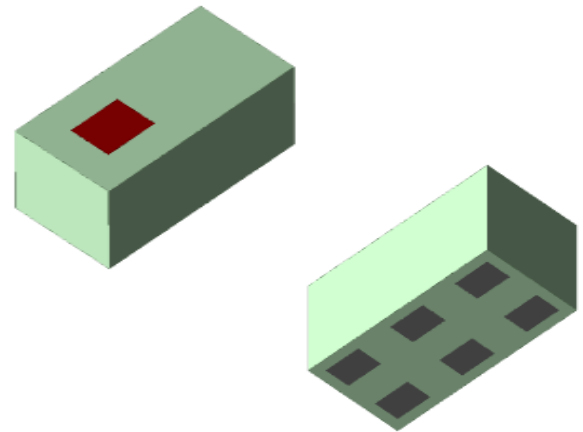


3.75 GHz Band Pass Filter

- 3300 - 4200 MHz passband
- Fit for mobile communication systems
- Low insertion loss
- High out-of-band rejection
- Ultra small SMD, EIA 0402
- RoHS complaint



General Specifications^{1 2}

Insertion Loss (dB)	3300 - 4200 MHz	1.7 Max.
Return Loss (dB)	3300 - 4200 MHz	10 Min.
Attenuation (dB)	600 - 960 MHz	35 Min.
	1164 - 1300 MHz	35 Min.
	1476 - 1511 MHz	35 Min.
	1559 - 1610 MHz	40 Min.
	1710 - 1785 MHz	35 Min.
	1805 - 2200 MHz	25 Min.
	2300 - 2690 MHz	20 Min.
	4215 - 5115 MHz	1 Min.
	5150 - 5925 MHz	15 Min.
	6600 - 8400 MHz	20 Min.
	9900 - 12600 MHz	22 Min.
	13200 - 21000 MHz	10 Min.

Maximum Ratings

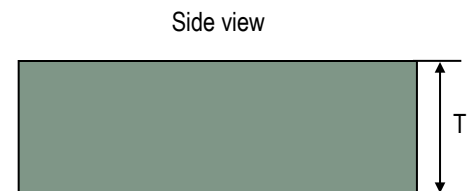
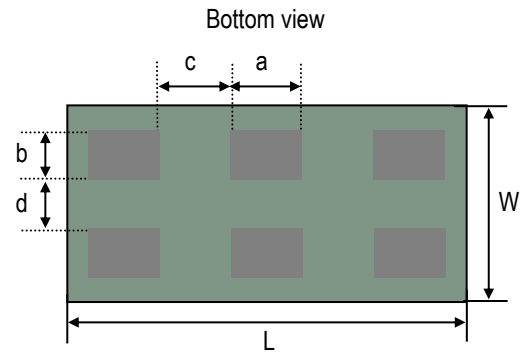
Power Capacity (W)	3 Max. (CW)
Operating Temperature (°C)	-40 to +85
Recommended Storage Conditions post-installation (°C)	-40 to +85
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

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 3750BP07B0900001CE1.

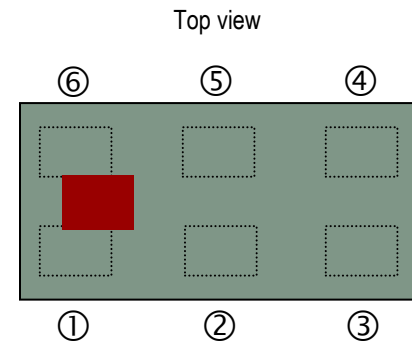
Mechanical Dimensions

	Inches			Millimeters		
L	0.039	±	0.002	1.00	±	0.05
W	0.020	±	0.002	0.50	±	0.05
T	0.014		Max.	0.35		Max.
a	0.007	±	0.002	0.18	±	0.05
b	0.005	±	0.002	0.125	±	0.05
c	0.007	±	0.002	0.18	±	0.05
d	0.006	±	0.002	0.15	±	0.05



Terminal Configuration³

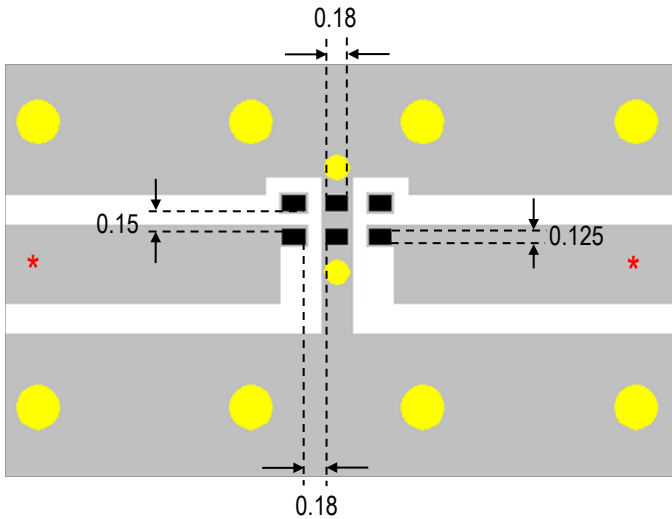
Pin Number	Function
1	INPUT/OUTPUT
2	GND
3	INPUT/OUTPUT
4	NC
5	GND
6	NC







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 colored mark facing up.



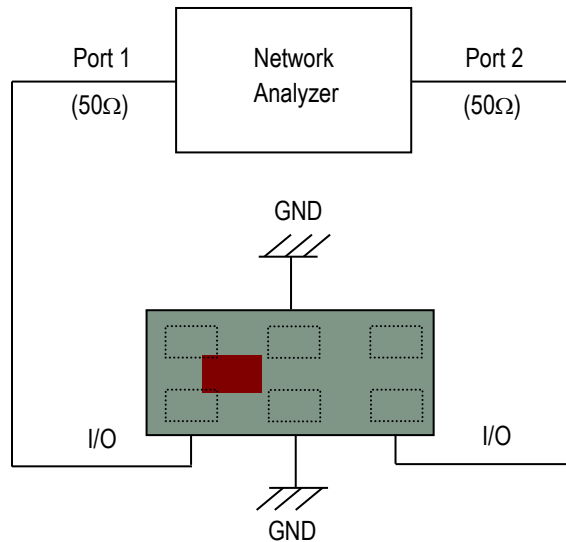
Units in mm

-  Solder Resist
-  Land
-  Through-hole (ϕ 0.35)
-  Through-hole (ϕ 0.20)

* Transmission line width should be designed to match 50 Ω 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>

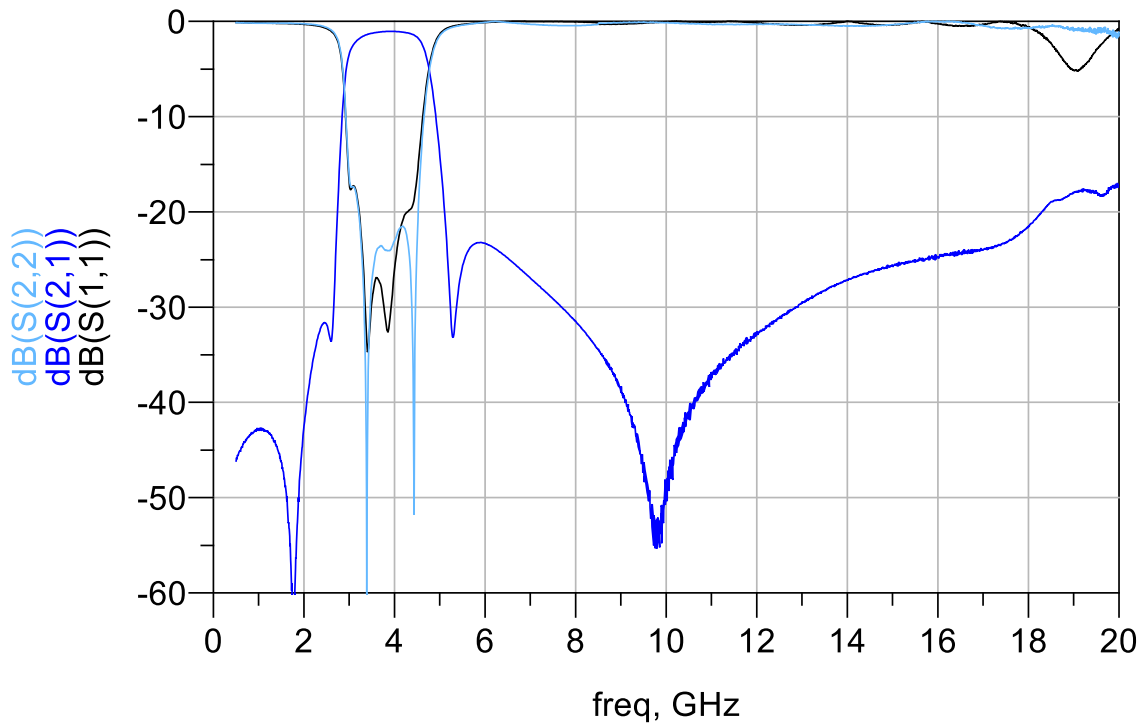
Measuring Diagram





RF Measurement (T = 25°C)

Insertion Loss, Return Loss and Attenuation

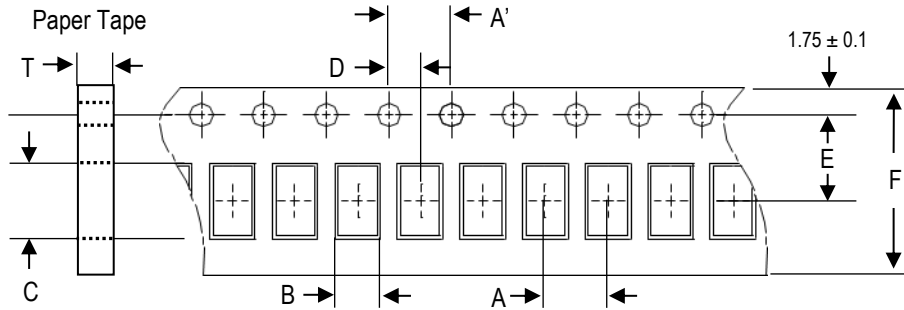


S-parameters, layout file, and complimentary design review are available upon request. Contact our application engineers at <https://www.johansontechnology.com/ask-a-question>



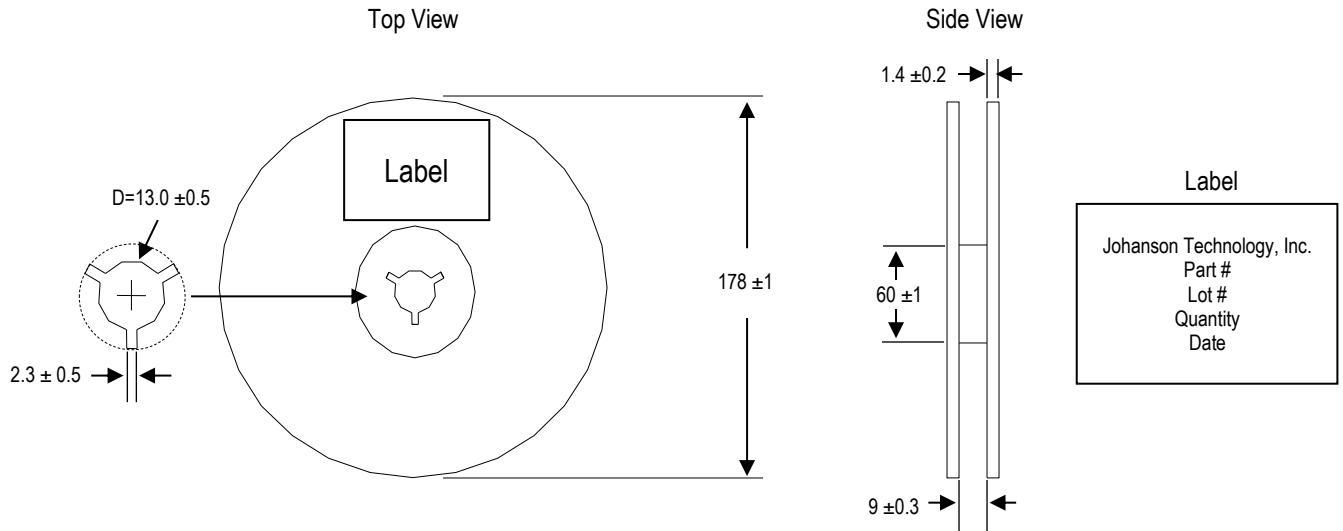
Tape and Reel Specification (Units in mm)

Tape Dimensions

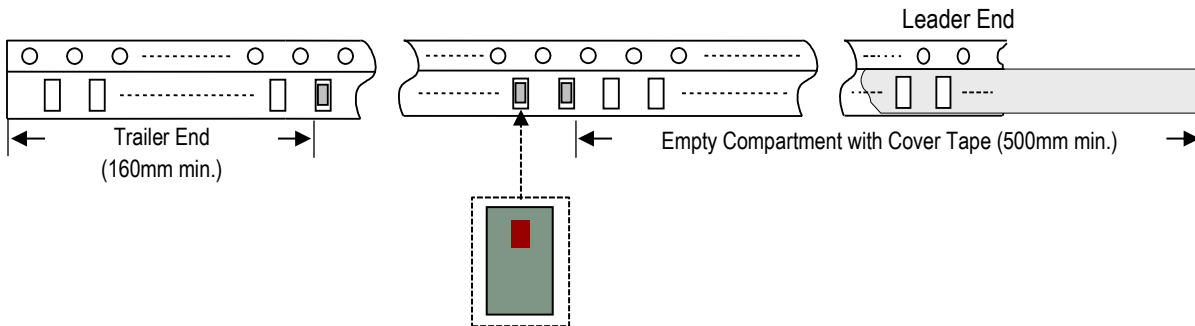


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
2.0 ±0.05	4.0 ±0.1	0.62 ±0.03	1.12 ±0.03	2.0 ±0.05	3.5 ±0.05	8.0 ±0.1	0.43 ±0.03	10,000 pcs.	Paper

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Number

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	3750BP07B0900001B	Nickel Tin
T & R (7" Reel Paper Tape)	3750BP07B0900001T (Qty: 10,000 pcs./reel)	
Evaluation Board with 2 SMA Connectors	3750BP07B0900001CE1	

Important Links

[3750BP07B0900001T 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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