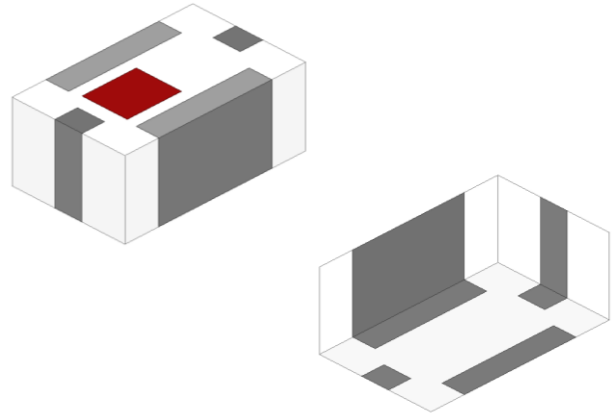


7.0 GHz UWB Band Pass Filter, AEC-Q200 Qualified

- 6200 - 7800 MHz passband
- Fit for wireless communication systems
- Low insertion loss
- High out-of-band rejection
- SMD, EIA 0805
- RoHS compliant



General Specifications^{1 2}

Insertion Loss (dB)	6200 – 7800 MHz	1.75 Typ.		2.0 Max.
Return Loss (dB)	6200 – 7800 MHz	12 Typ.	10 Min.	
Group Delay (ns)	6200 – 7800 MHz	0.7 Typ.		1.0 Max.
Attenuation (dB)	3000 – 3400 MHz	39 Typ.	30 Min.	
	3400 – 3800 MHz	39 Typ.	35 Min.	
	3800 – 5600 MHz	35 Typ.	30 Min.	
	4900 – 5850 MHz	5 Typ.	3 Min.	
	8500 – 16000 MHz	30 Typ.	25 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 18 Months Max.

ESD Susceptibility Ratings

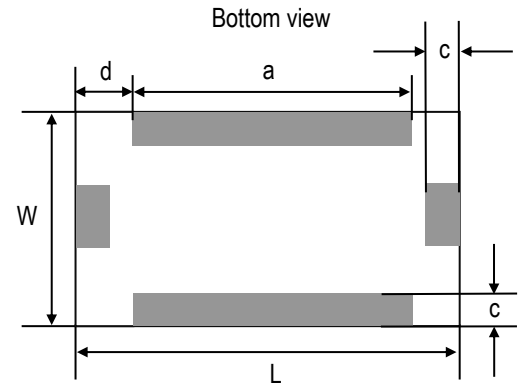
HBM (V)	2000 Min
CDM (V)	500 Min.

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

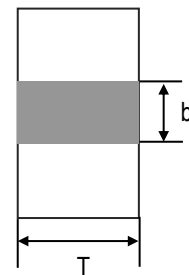
² General specifications measured on Johanson's evaluation board P/N 7000BP15A1600001CE1.

Mechanical Dimensions

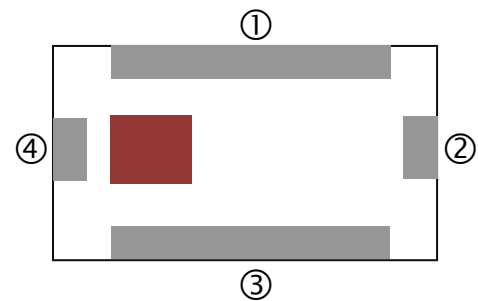
	Inches			Millimeters		
L	0.079	±	0.006	2.00	±	0.15
W	0.049	±	0.004	1.25	±	0.10
T	0.037	±	0.004	0.95	±	0.10
a	0.049	±	0.006	1.25	±	0.15
b	0.012	±	0.006	0.30	±	0.15
c	0.010	±	0.006	0.25	±	0.15
d	0.014	±	0.006	0.35	±	0.15



Side view



Top view



Terminal Configuration³

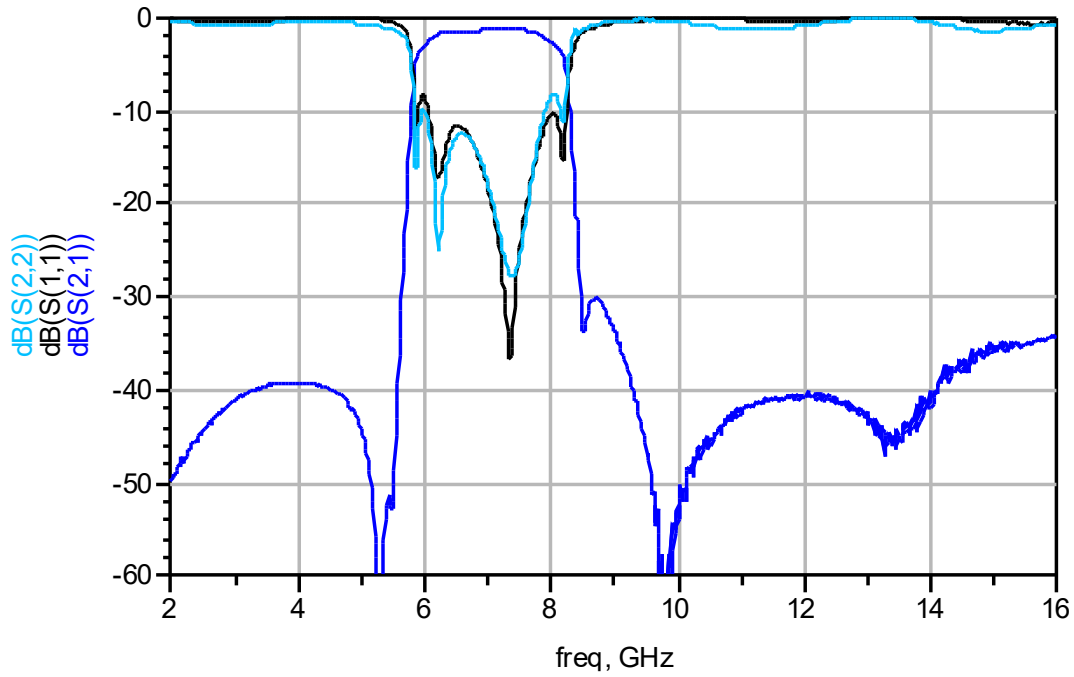
Pin Number	Function
1	GND
2	INPUT/OUTPUT
3	GND
4	INPUT/OUTPUT

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

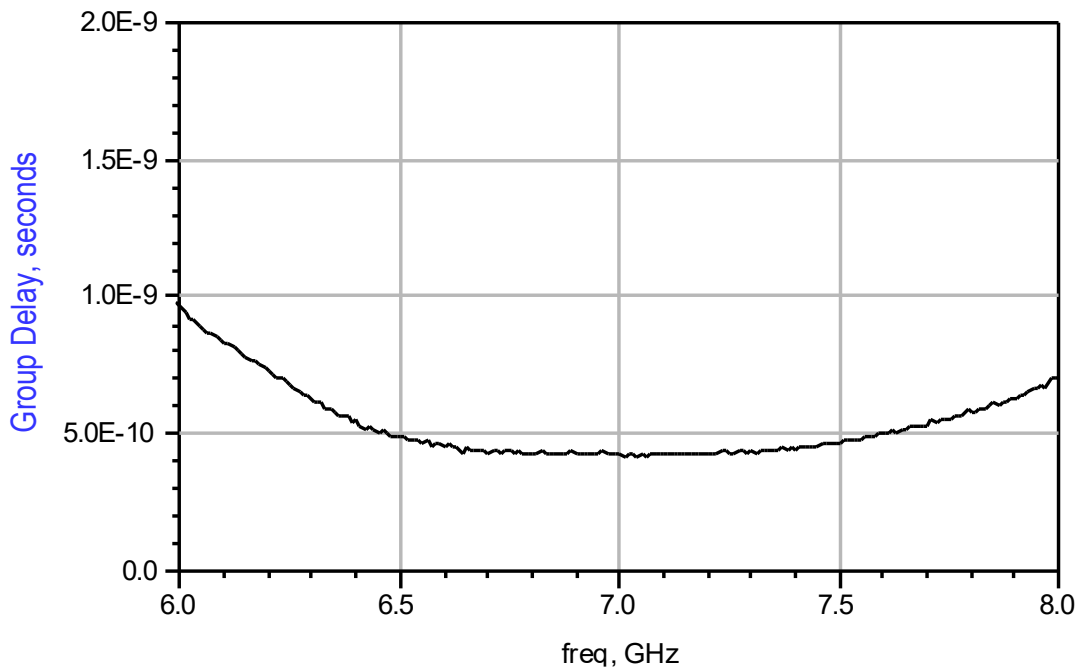


RF Measurement (T = 25°C)

Insertion Loss, Return Loss and Attenuation



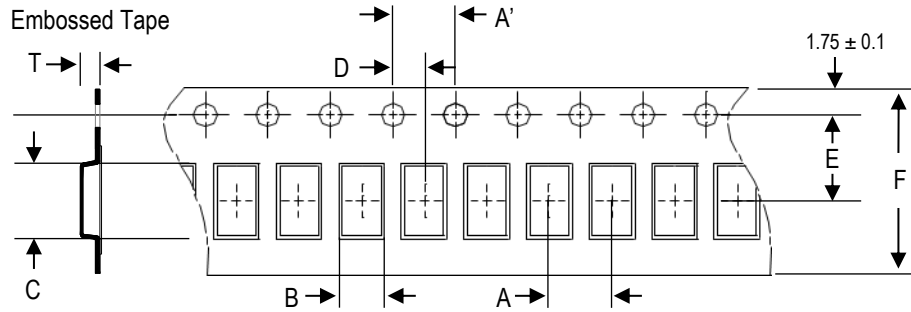
Group Delay



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

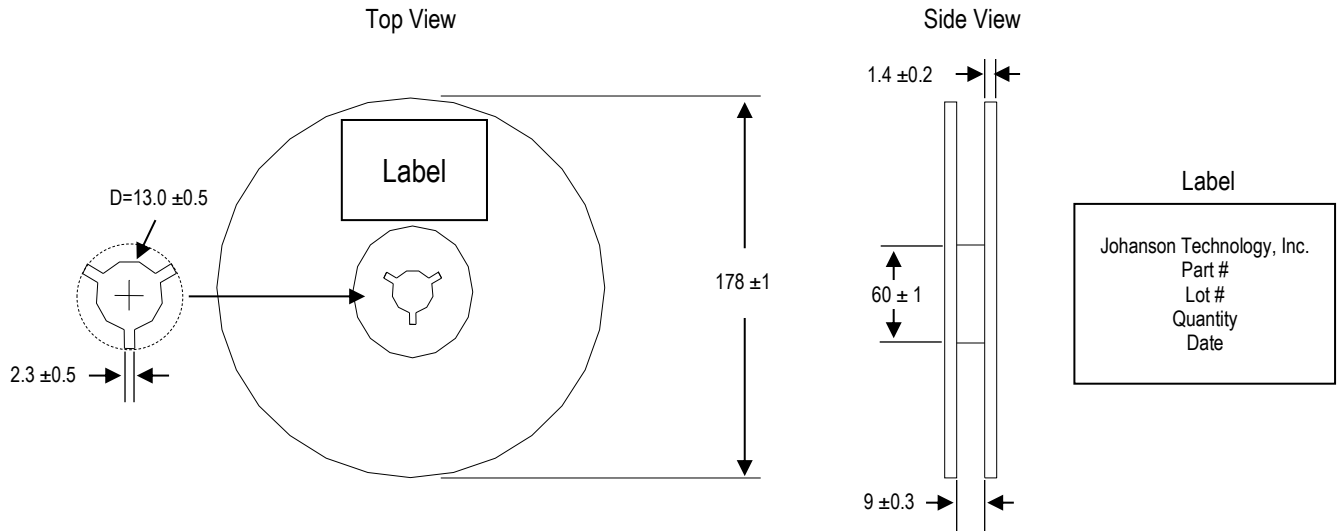
Tape and Reel Specification (Units in mm)

Tape Dimensions

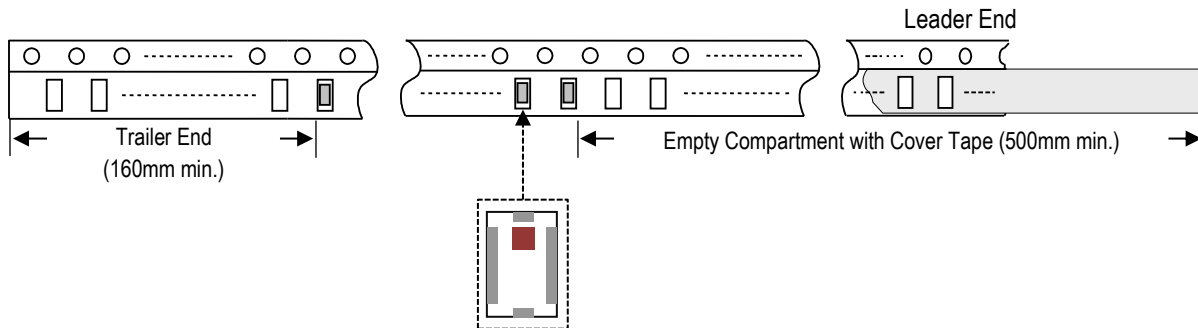


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0 ±0.1	4.0 ±0.1	1.35 ±0.05	2.15 ±0.05	2.0 ±0.05	3.5 ±0.1	8.0 ±0.1	1.08 ±0.05	4,000pcs.	Plastic (Embossed)

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Number

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	7000BP15A1600002B	Nickel Tin
T & R (7" Reel Embossed Tape)	7000BP15A1600002E (Qty: 4,000 pcs/reel)	
Evaluation Board with 2 SMA Connectors	7000BP15A1600001CE1	

Important Links

[7000BP15A1600002E 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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