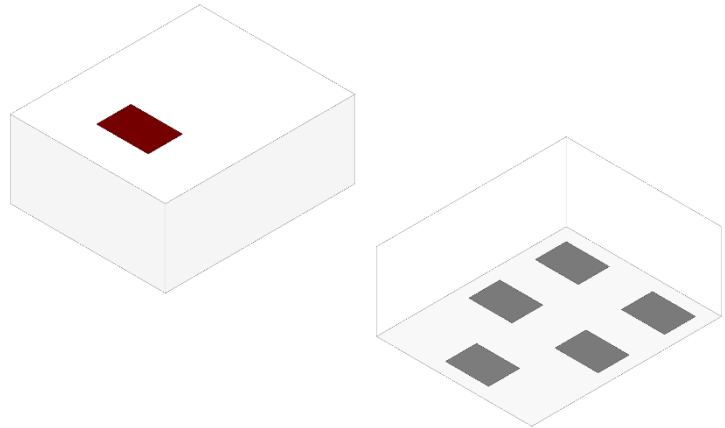


2.45 GHz Band Pass Filter, AEC-Q200 Qualified

- 2400 - 2500 MHz pass band
- SMD, miniature case size (1.1 x 0.9 x 0.45 mm)
- 1W Max. power rating
- RoHS compliant



General Specifications^{1 2}

Insertion Loss (dB)	2400 - 2500 MHz	1.2 Max.
Return Loss (dB)	2400 - 2500 MHz	12 Min.
Attenuation (dB)	50 - 1580 MHz	20 Min.
	1710 - 1990 MHz	17 Min.
	4800 - 5000 MHz	28 Min.
	7200 - 7500 MHz	29 Min.

Maximum Ratings

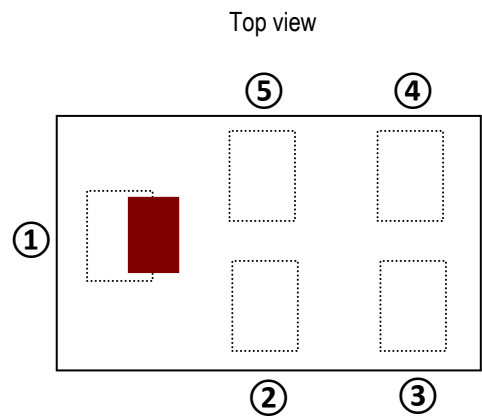
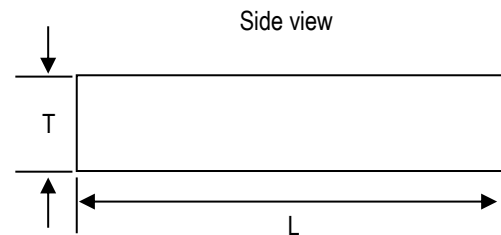
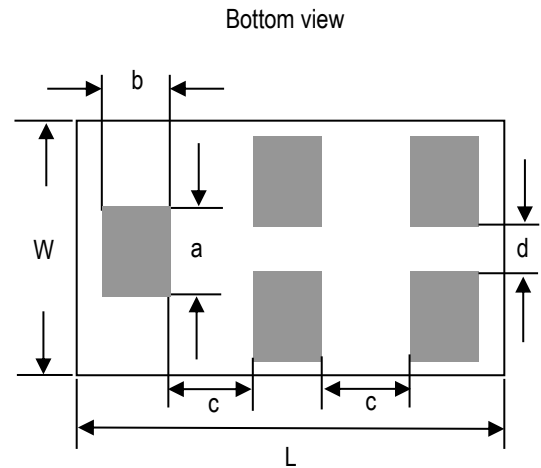
Power Capacity (W)	1 Max. (CW)
Operating Temperature (°C)	-40 to +105
Recommended Storage Conditions post-installation (°C)	-40 to +105
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

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 2450BP08C0100001CE1.

Mechanical Dimensions

	Inches			Millimeters		
L	0.043	±	0.004	1.10	±	0.10
W	0.035	±	0.004	0.90	±	0.10
T	0.018		Max.	0.45		Max.
a	0.010	±	0.002	0.25	±	0.05
b	0.007	±	0.002	0.18	±	0.05
c	0.008	±	0.002	0.205	±	0.05
d	0.010	±	0.002	0.25	±	0.05



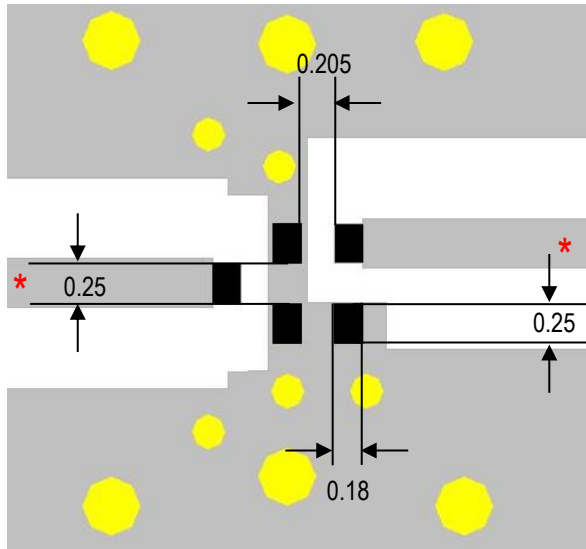
Terminal Configuration³

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


³ 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

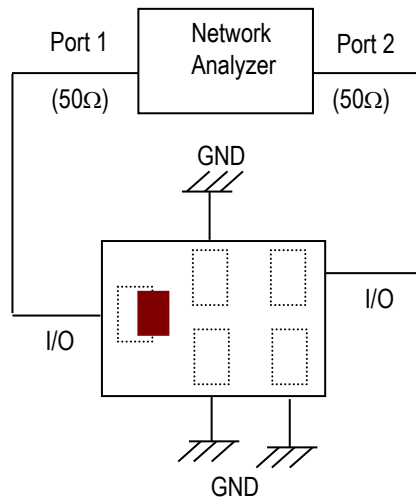
 Through-hole (ϕ 0.35)

* 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>

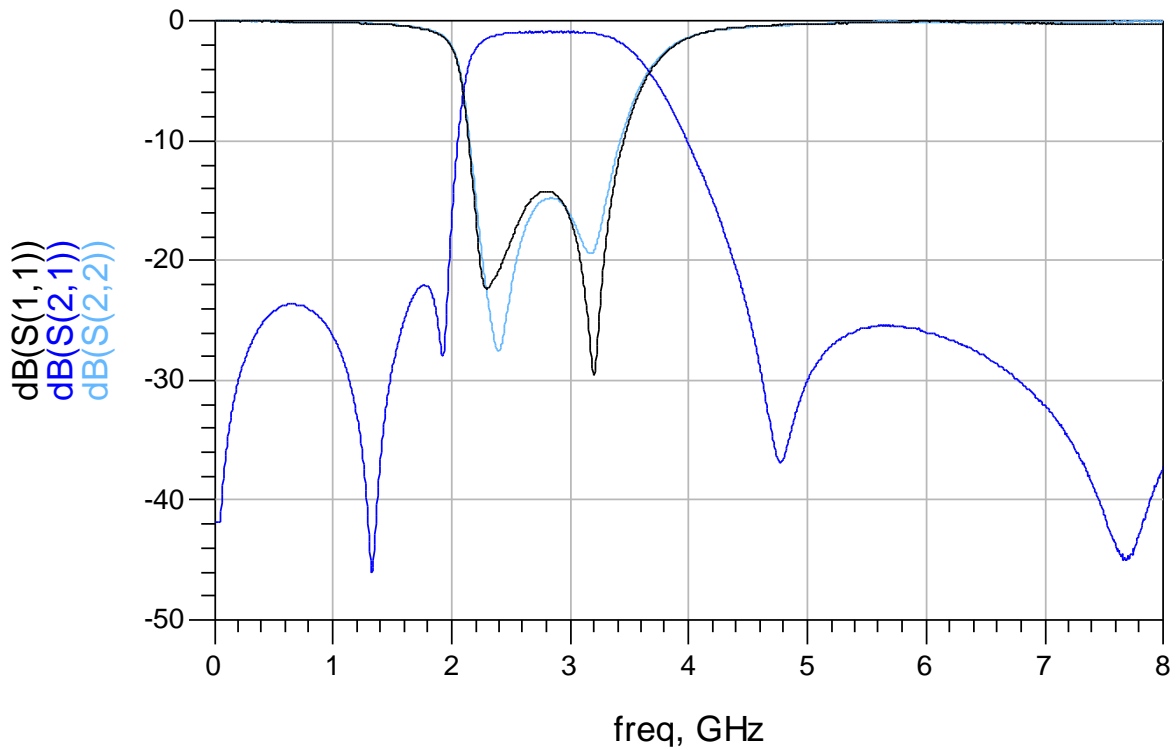


Measuring Diagram



RF Measurement (T = 25°C)

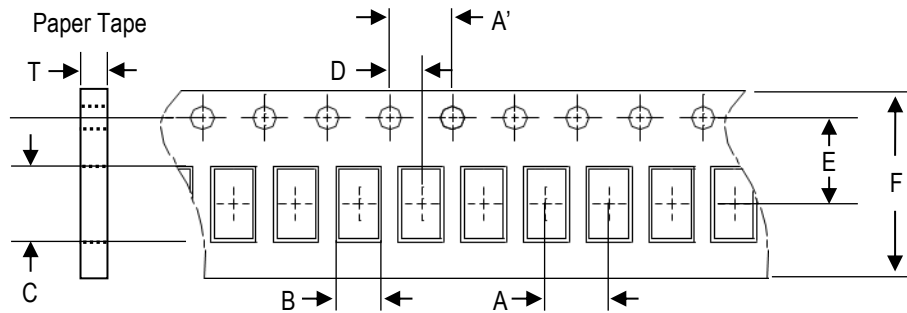
Insertion Loss, Return Loss



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

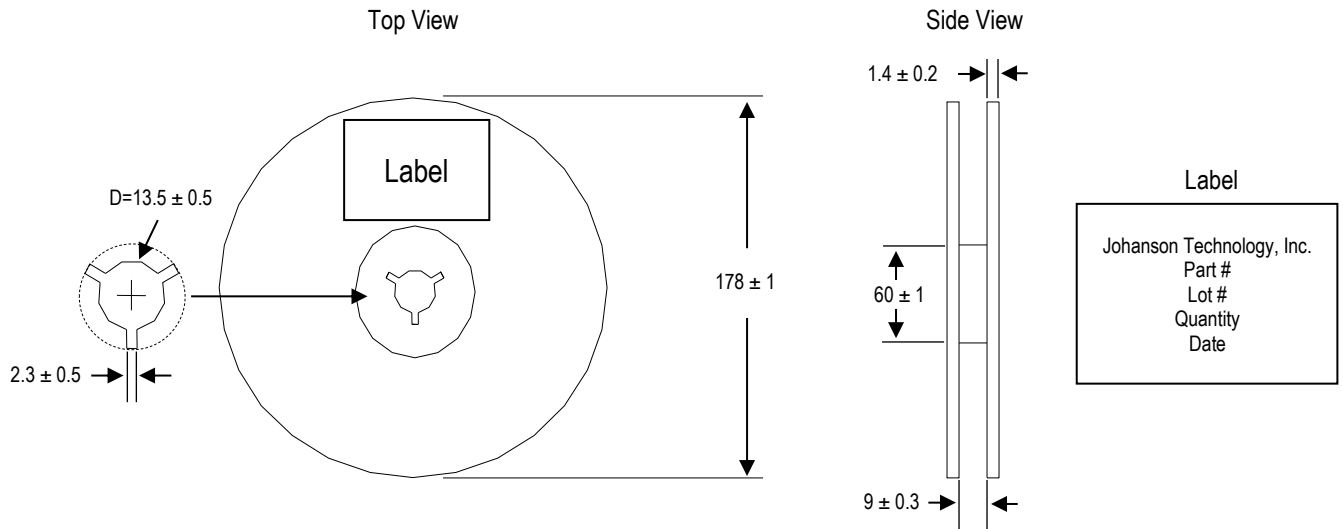
Tape and Reel Specification (Units in mm)

Tape Dimensions

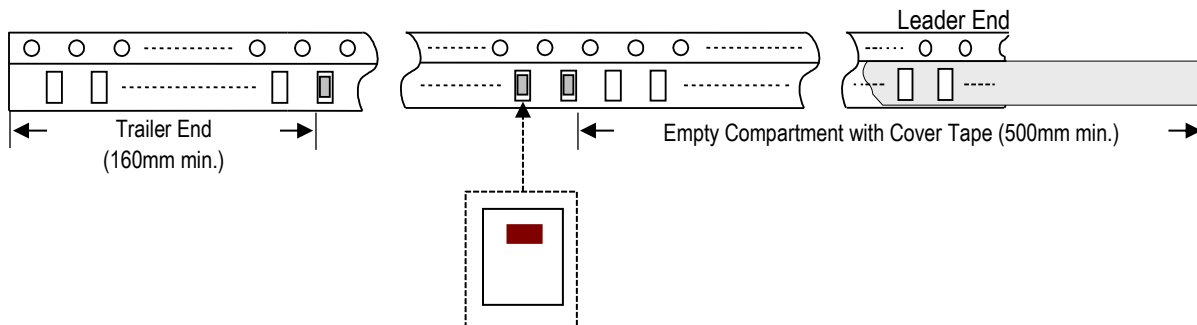


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0±0.05	4.0±0.1	1.08±0.05	1.25±0.05	2.0±0.05	3.5±0.05	8.0±0.1	0.5±0.03	6,000pcs.	Paper

Reel Dimensions



Leader and Trailer Dimensions



Orderable Part Numbers

Packaging Style	Part Number	Termination
Bulk (loose pcs.)	2450BP08C0100002B	Nickel Tin
T & R (7" Reel Paper Tape)	2450BP08C0100002T (Qty: 6,000 pcs/reel)	
Evaluation Board with 2 SMA Connectors	2450BP08C0100001CE1	

Important Links

[2450BP08C0100002T 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.

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