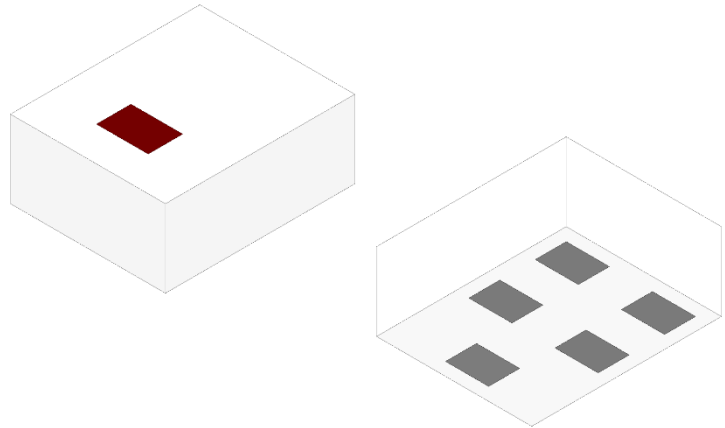


## 2.45 GHz Band Pass Filter, AEC-Q200 Qualified

- 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<sup>1 2</sup>

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

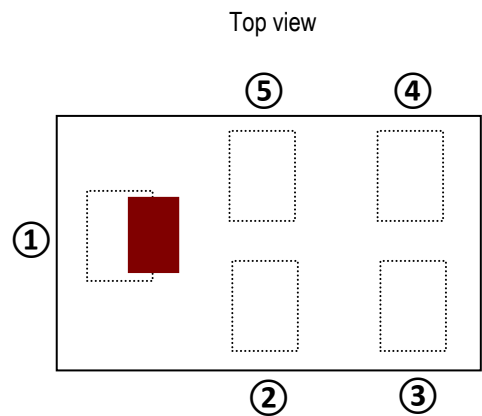
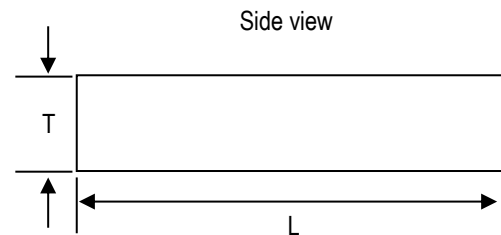
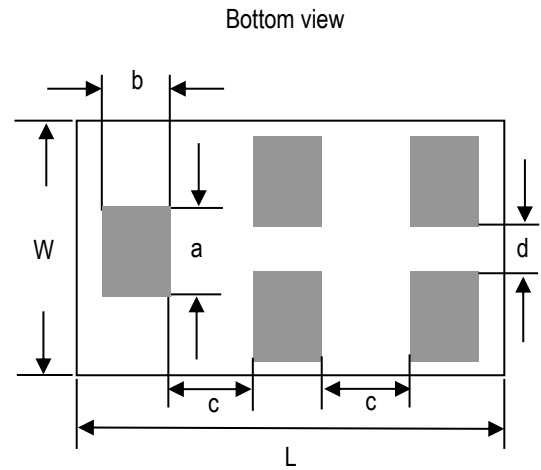
Power Capacity (W)	1 Max. (CW)
Operating Temperature (°C)	-40 to +105
Recommended Storage Conditions post-installation (°C)	-40 to +105
Recommended Storage Conditions and Period for Unused T&R Product	45% - 75% RH +5 to +35 °C 18 Months Max.

<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 2450BP08C0100001CE1.

**Mechanical Dimensions**

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



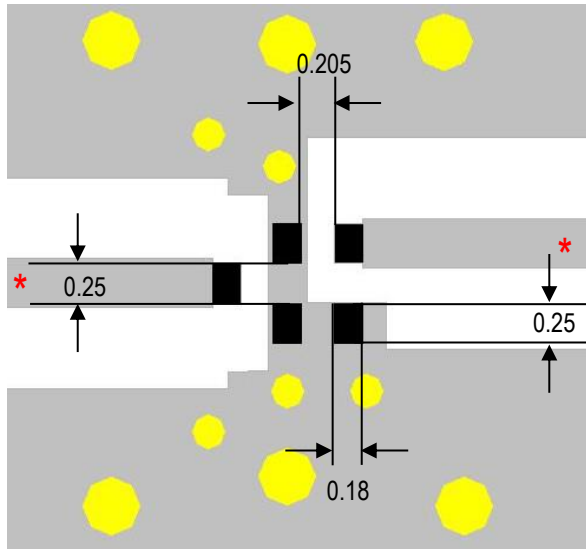
**Terminal Configuration<sup>3</sup>**

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

<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

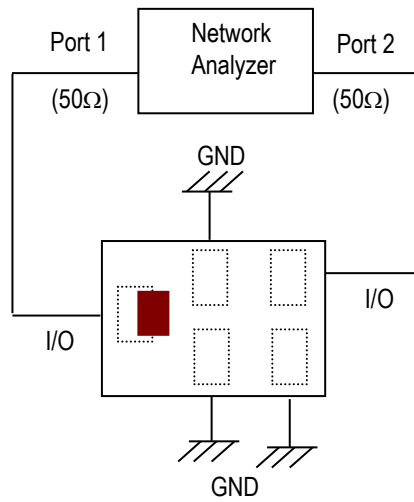
 Land

 Through-hole ( $\phi$  0.35)

\* Transmission line width should be designed to match 50 $\Omega$  characteristic impedance, depending on PCB material and thickness.

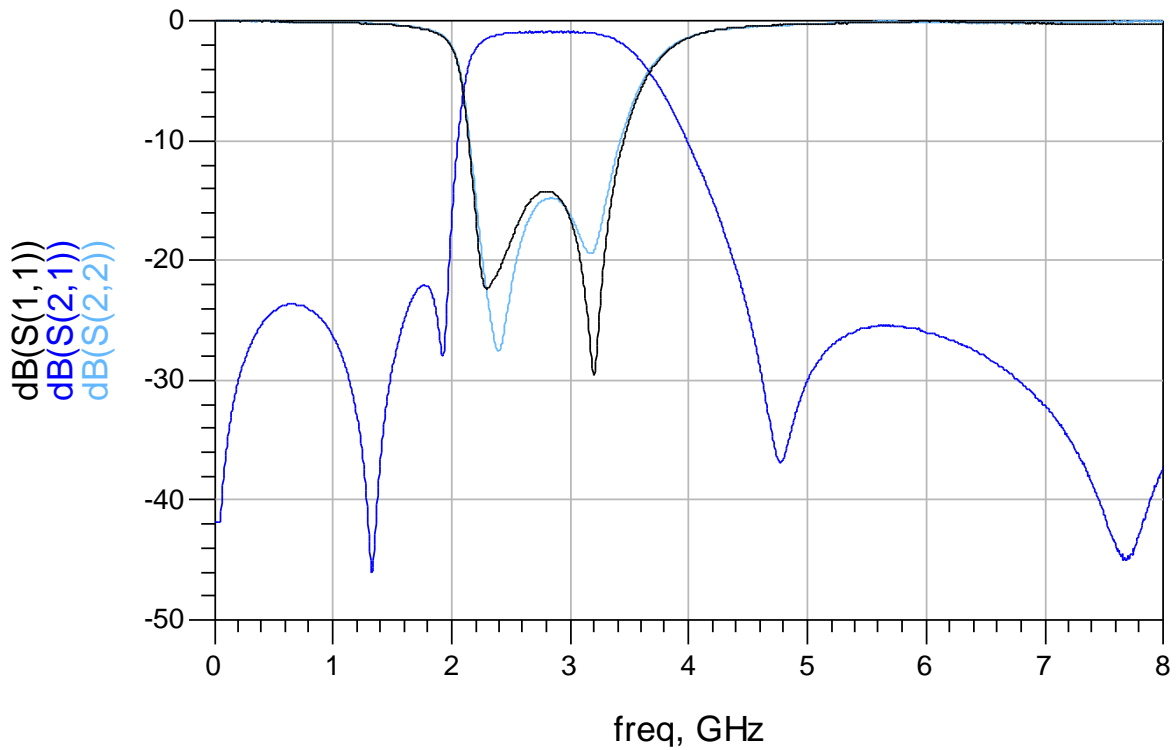
If you'd like the CAD PCB layout or have any questions,  
contact our application engineers at <https://www.johansontechnology.com/ask-a-question>

**Measuring Diagram**



**RF Measurement (T = 25°C)**

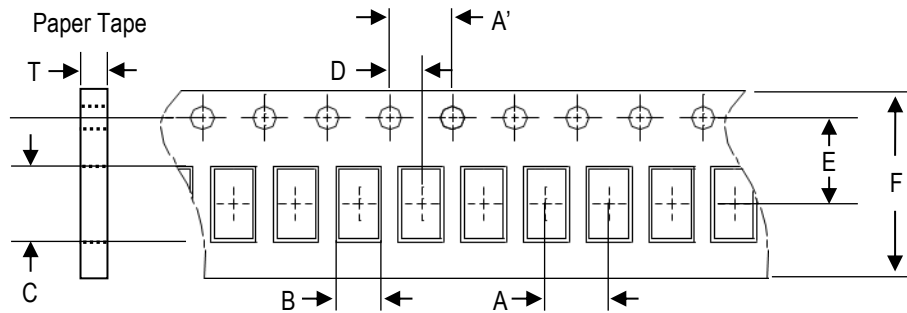
Insertion Loss, Return Loss



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

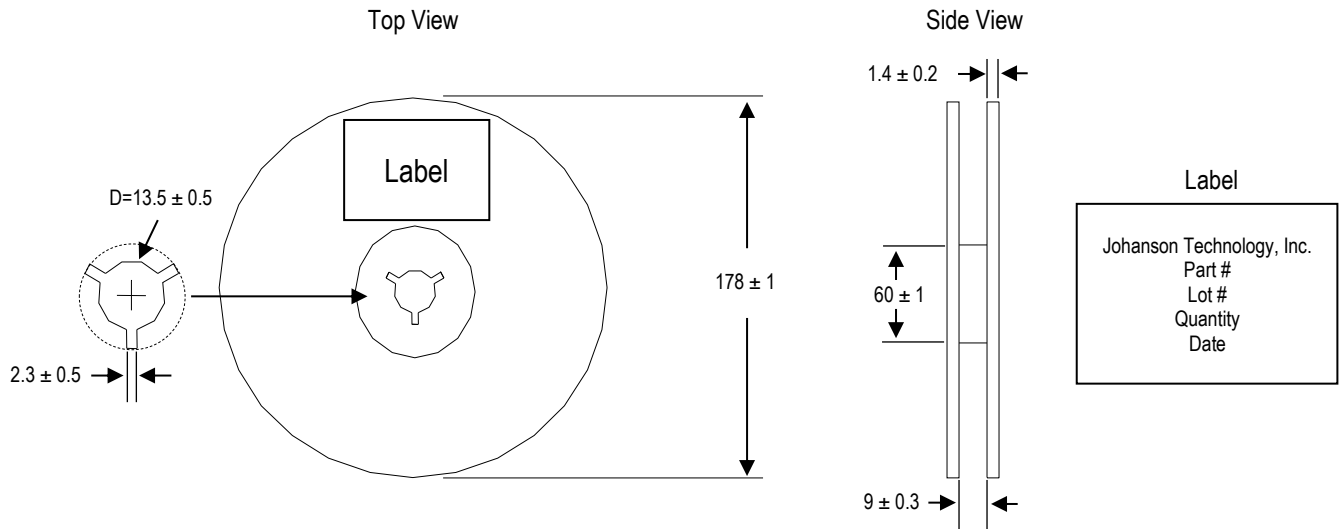
**Tape and Reel Specification (Units in mm)**

**Tape Dimensions**

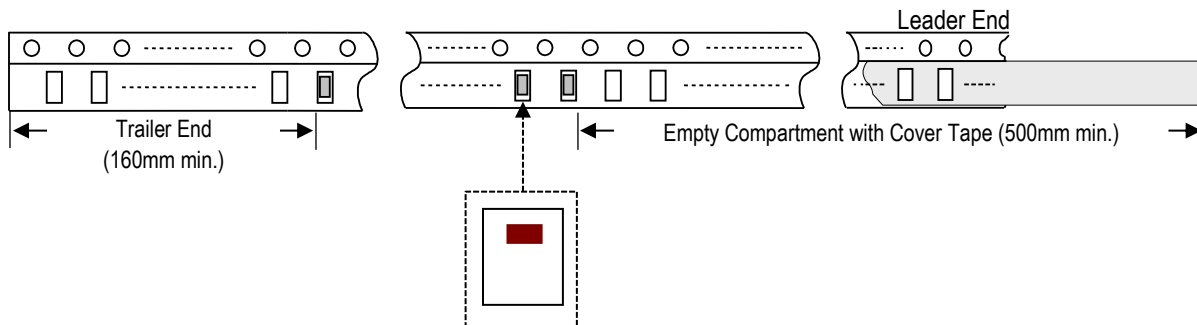


A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
4.0±0.05	4.0±0.1	1.08±0.05	1.25±0.05	2.0±0.05	3.5±0.05	8.0±0.1	0.5±0.03	6,000pcs.	Paper

**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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