

# High Frequency Ceramic Solutions

**2.45GHz Band Pass Filter, EIA 0603**

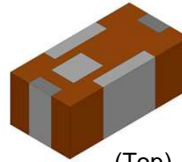
**P/N 2450BP14E0100**

Detail Specification: 8/6/2020

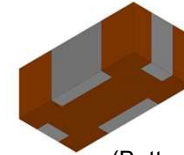
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## General Specifications

<b>Part Number</b>	2450BP14E0100
<b>Frequency (MHz)</b>	2400 - 2500
<b>Impedance (Ohm)</b>	50
<b>Insertion Loss (dB)</b>	2.5 max.
<b>Return Loss (dB)</b>	9.5 min.
<b>Power Capacity</b>	500 mW max. (CW)



(Top)



(Bottom)

<b>Frequency</b>	<b>Attenuation (dB)</b>	<b>Operating Temperature</b>	-40 to +85°C
824 - 960MHz	35 min.	<b>Reel Quantity</b>	4,000
1710 - 1910MHz	38 min.	<b>Recommended Storage Conditions of unused product on T&amp;R *</b>	+5 to +35°C, 18 mos. max. Humidity 45~75% RH
4800 - 5000MHz	25 min.		
7200 - 7500MHz	20 min.		

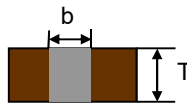
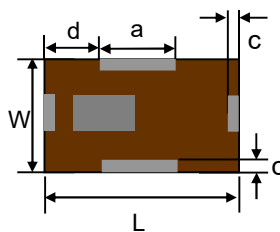
\*18 months max. in vacuum sealed bag and 1 week after opened. Please keep unused parts in vacuum sealed bags.  
For more info go to <https://www.johansontechnology.com/silverleads-profile>.

## Part Number Explanation

<b>P/N Suffix</b>	<b>Packing Style</b>	Bulk	Suffix = S	Eg. 2450BP14D0100S
		T & R	Suffix = T	Eg. 2450BP14D0100T
	<b>Termination Style</b>	Ag/Pt	Suffix = None	E.g. 2450BP14D0100(T or S)
	<b>Evaluation Board</b>	2450BP14D0100-EB1SMA (2 female 50Ω SMA connectors)		

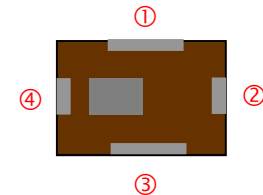
## Mechanical Dimensions

	In	mm
<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>	0.024 ± 0.004	0.60 ± 0.10
<b>a</b>	0.028 ± 0.006	0.70 ± 0.15
<b>b</b>	0.012 ± 0.004	0.30 ± 0.10
<b>c</b>	0.006 ± 0.004	0.15 ± 0.10
<b>d</b>	0.018 ± 0.006	0.45 ± 0.15



## Terminal Configuration

No.	Function
1	GND
2	IN/OUT
3	GND
4	IN/OUT



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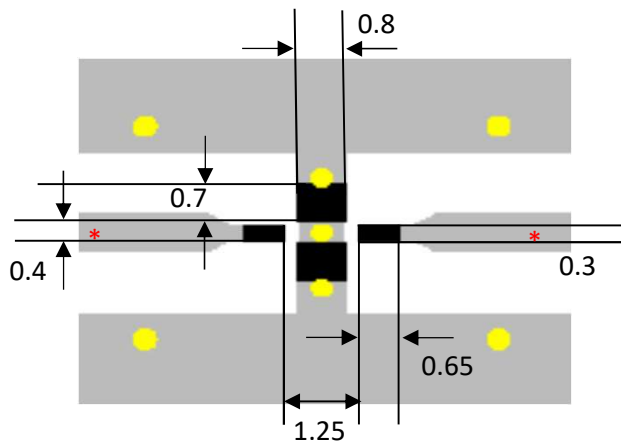
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## Mounting Considerations

Mount these devices with colored mark facing up.



Units: mm

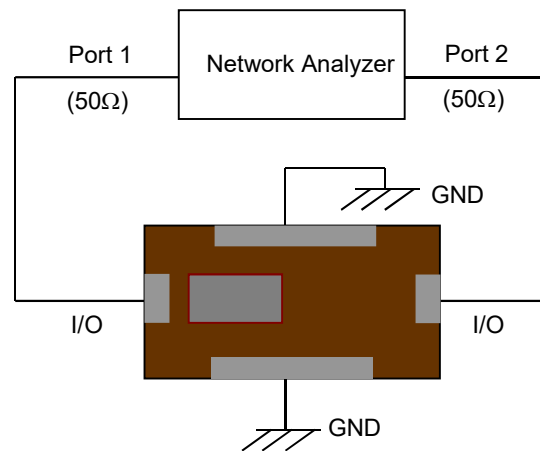
- Solder
- Resist Land
- Land
- Through-hole ( $\phi$  0.35)

\* Line width should be designed to match 50 ohm characteristic impedance, depending on PCB material and thickness.

Need our help laying this out for you? Need the layout file? Send us a message at:

<https://www.johansontechnology.com/ask-a-question>

## Measuring Diagram



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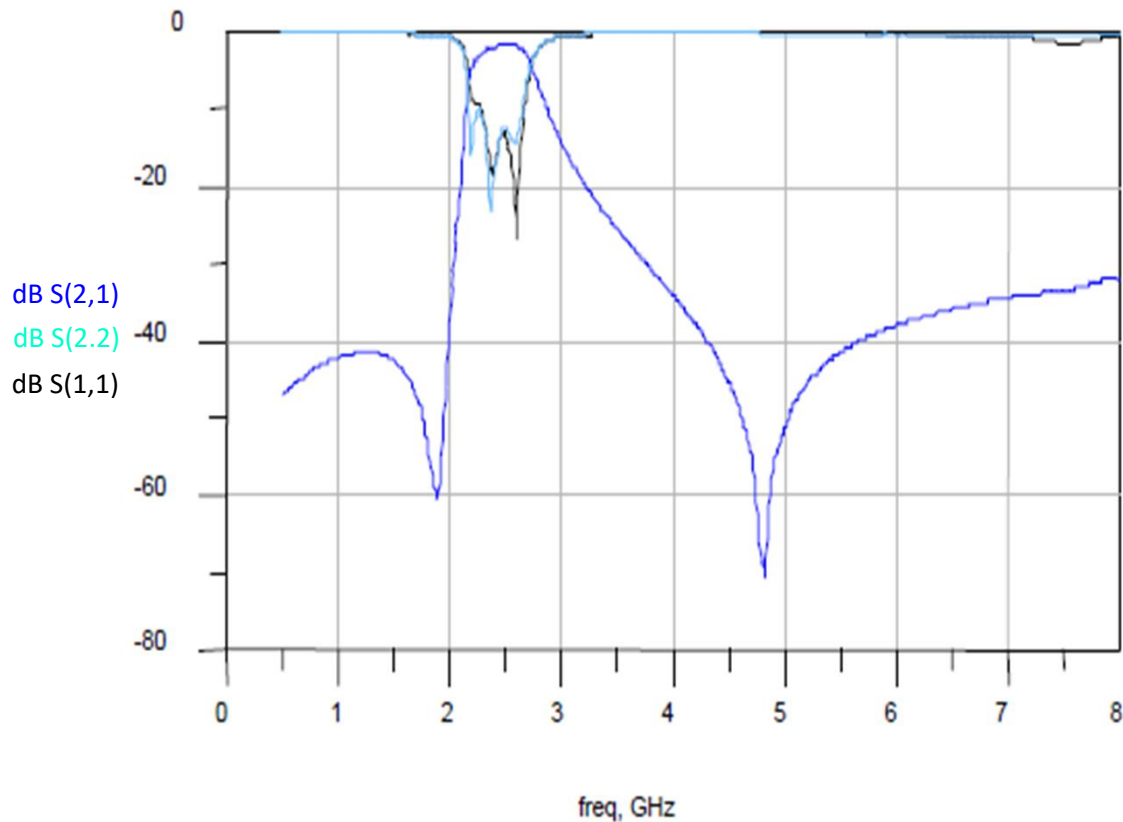
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## Typical Electrical Characteristics (T=25 °C)

### Insertion and Return Loss



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## Band Pass Filters

<https://www.johansontechnology.com/band-pass-filters>

## RoHS Compliance

<https://www.johansontechnology.com/rohs-compliance>

## Packaging information

<https://www.johansontechnology.com/tape-reel-packaging>

## Soldering Information

<https://www.johansontechnology.com/ipcsoldering-profile>

## Layout Files, s-parameters and any other technical questions

<https://www.johansontechnology.com/ask-a-question>

## MSL Info

<https://www.johansontechnology.com/msl-rating>

## Recommended Storage Condition and Max Shelf Life

<https://www.johansontechnology.com/recommended-storage-conditions>

## Antenna layout and tuning techniques

<https://www.johansontechnology.com/tuning>

## Antenna layout review, tuning, and characterization services

<https://www.johansontechnology.com/ipc-antenna-services>

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