

# High Frequency Ceramic Solutions

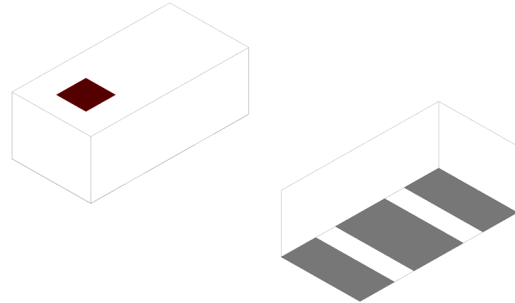
**2.4GHz High Rejection BPF with LGA-type terminations for reduced effective footprint, EIA 0603**

**P/N 2450BP14F0100**

Detail Specification: 12/13/2021

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General Specifications	
Part Number	2450BP14F0100
Frequency (MHz)	2400 - 2500
Insertion loss (dB)	2.5 typ. (2.8 max.)
Return Loss (dB)	10 min.
Power Capacity (W)	1 max. (CW)
Operating Temperature	-40 to +85°C



Attenuation (dB)		Reel Quantity	4,000 pcs
880 - 915 MHz	40 min.	Recommended Solder Paste	SAC 305
1710 - 1850 MHz	40 min.	Recommended Storage Conditions for unused T&R product	+5 to +35°C Humidity 45 - 75% RH 18 months max.
1850 - 1910 MHz	40 min.		
1920 - 1990 MHz	40 min.		
2110 - 2170 MHz	25 min.		
4800 - 5000 MHz	30 min.		
7200 - 7500 MHz	20 min.	*12 months in vacuum sealed bag and 1 week after opened. Please keep unused parts in vacuum sealed bags	

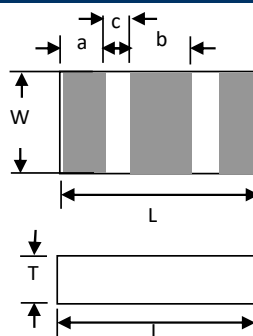
For more info like handling and soldering profile, go to: <https://www.johansontechnology.com/index.php/silverleads-profile>

## Part Number Explanation

P/N Suffix	Packaging Style	Bulk	Suffix = S	E.g. 2450BP14F0100S
		T & R	Suffix = E	E.g. 2450BP14F0100T
	Termination Style	Ag/Pt	Suffix = None	E.g. 2450BP14F0100(S or T)
	Evaluation Board	50Ω SMA	Suffix = EBSMA	E.g. 2450BP14F0100-EB1SMA

## Mechanical Dimensions

	In	mm
L	0.063 ± 0.006	1.6 ± 0.15
W	0.031 ± 0.006	0.8 ± 0.15
T	0.024 max.	0.6 max.
a	0.014 ± 0.004	0.35 ± 0.1
b	0.020 ± 0.004	0.5 ± 0.1
c	0.008 ± 0.002	0.2 ± 0.05



## Terminal Configuration

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

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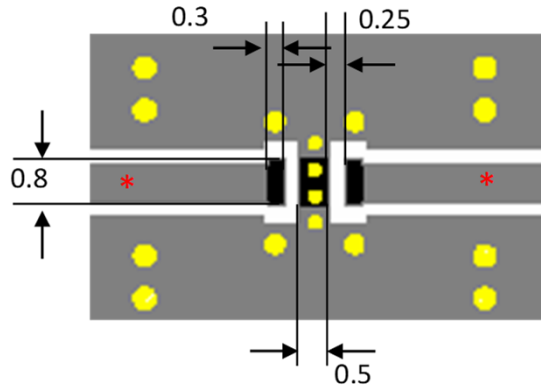
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## Mounting Pad Dimensions

Units in mm



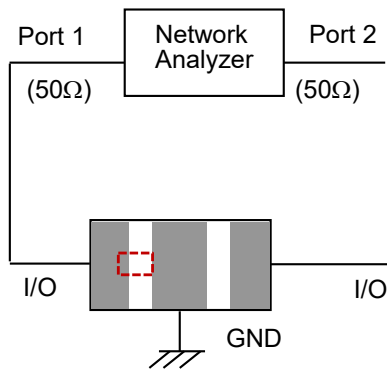
■ Solder Resist

■ Land

● GND Via ( $\phi$  0.35,  $\phi$  0.2)

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

## Measurement Schematic



Port 1: Filter IN/OUT  
Port 2: Filter IN/OUT

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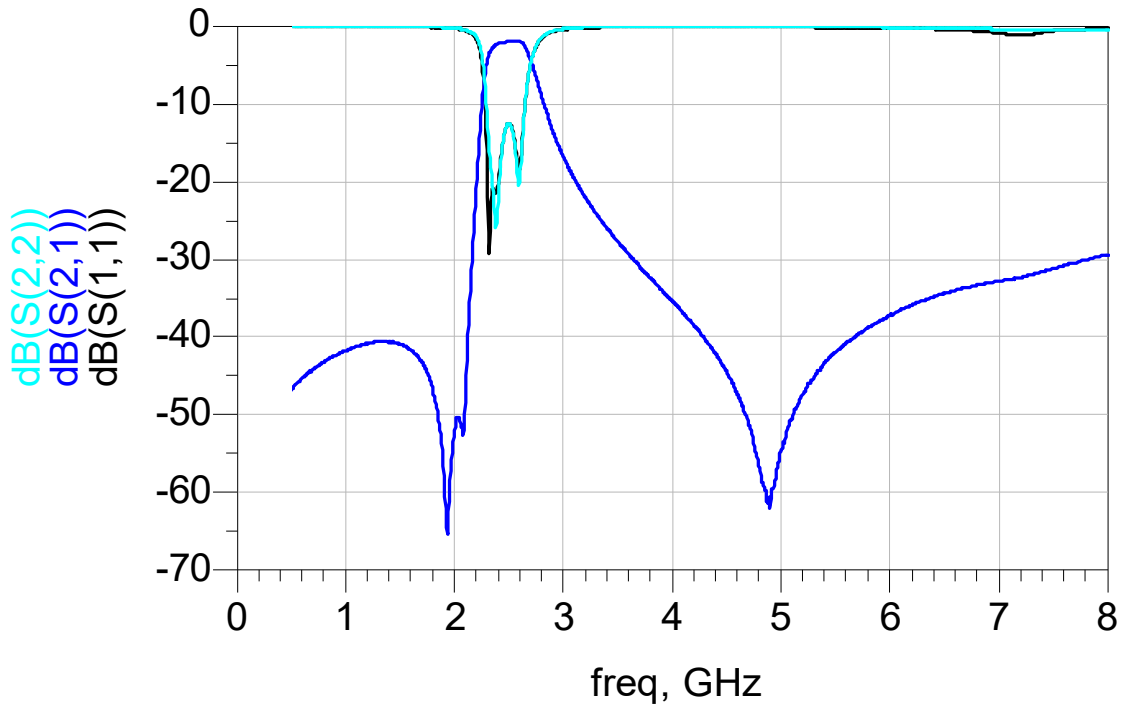
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## Typical Electrical Characteristics (T=25°C)

Insertion Loss & Return loss



Would you like the S-parameter file of the above? Send us a message at:  
<https://www.johansontechnology.com/ask-a-question>

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## Application Notes, Layout Files, and more

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

## Packaging information

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

## Soldering Information

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

## MSL Info

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

## Recommended Storage Condition and Max Shelf Life

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

## RoHS Compliance

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

## 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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