

# High Frequency Ceramic Solutions

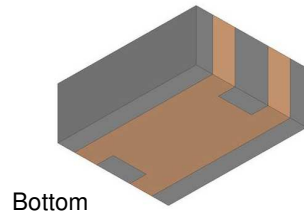
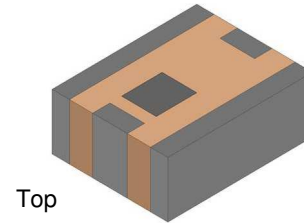
## 2.45GHz Band Pass Filter

P/N 2450BP39F100A

Detail Specification: 5/12/2021

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General Specifications	
Part Number	2450BP39F100A
Operating Frequency	2400 - 2500 MHz
Insertion Loss (dB)	2.4 max.
Return Loss (dB)	9.5 min.
Attenuation (dB)	45 min. @ 880 - 915MHz 48min. @ 1710 - 1990MHz 20min. @ 2110 - 2170MHz 30 min. @ 4800 - 5000MHz 30min. @ 7200 - 7500MHz
Impedance	50 Ω
Power Capacity	500 mW max.
Operating Temperature	-40 to +85°C
Solder Paste	SAC 305 type is recommended
Reel Quantity (pcs/reel)	3,000
Recommended Storage Conditions and Period for unused product on T&R	+5 to +35°C Humidity 45~75%RH 18 months max.*



\*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				
P/N Suffix	Packing Style	Bulk (loose pcs.)	Suffix = S	E.g. 2450BP39F100AS
		T & R	Suffix = E	E.g. 2450BP39F100AE
	Termination Style	Ag/Pt	Suffix = None	E.g. 2450BP39F100A(E or S)
	Evaluation Board	50Ω SMA	Suffix = EB-SMA	E.g. 2450BP39F100A-EB-SMA

Mechanical Dimensions		
	In	mm
L	0.098 ± 0.008	2.50 ± 0.20
W	0.079 ± 0.008	2.00 ± 0.20
T	0.037 ± 0.004	0.95 ± 0.10
a	0.012 ± 0.008	0.30 ± 0.20
b	0.024 ± 0.008	0.60 ± 0.20
c	0.012 ± 0.008	0.30 ± 0.20

Terminal Configuration	
No.	Function
1	GND
2	INPUT / OUTPUT
3	GND
4	INPUT / OUTPUT

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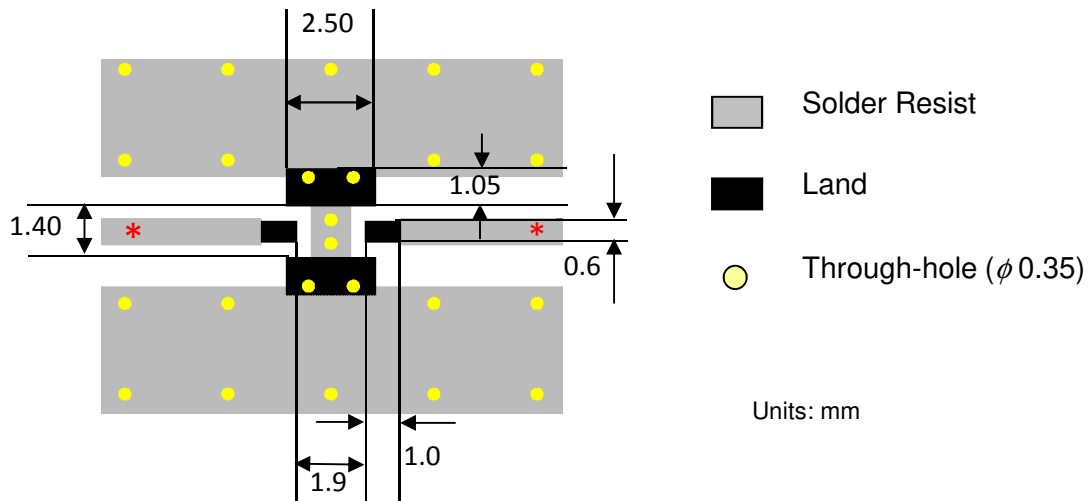
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### Mounting Pad Dimensions

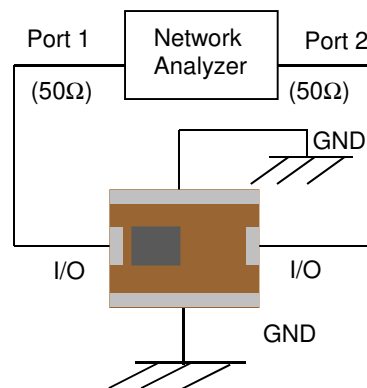
Mount these devices with brown mark facing up.

\* Line width should be designed to provide 50  $\Omega$  impedance matching characteristics.



Would you like the CAD layout? Send us a message at: <https://www.johansontechnology.com/ask-a-question>

### Measurement Schematic



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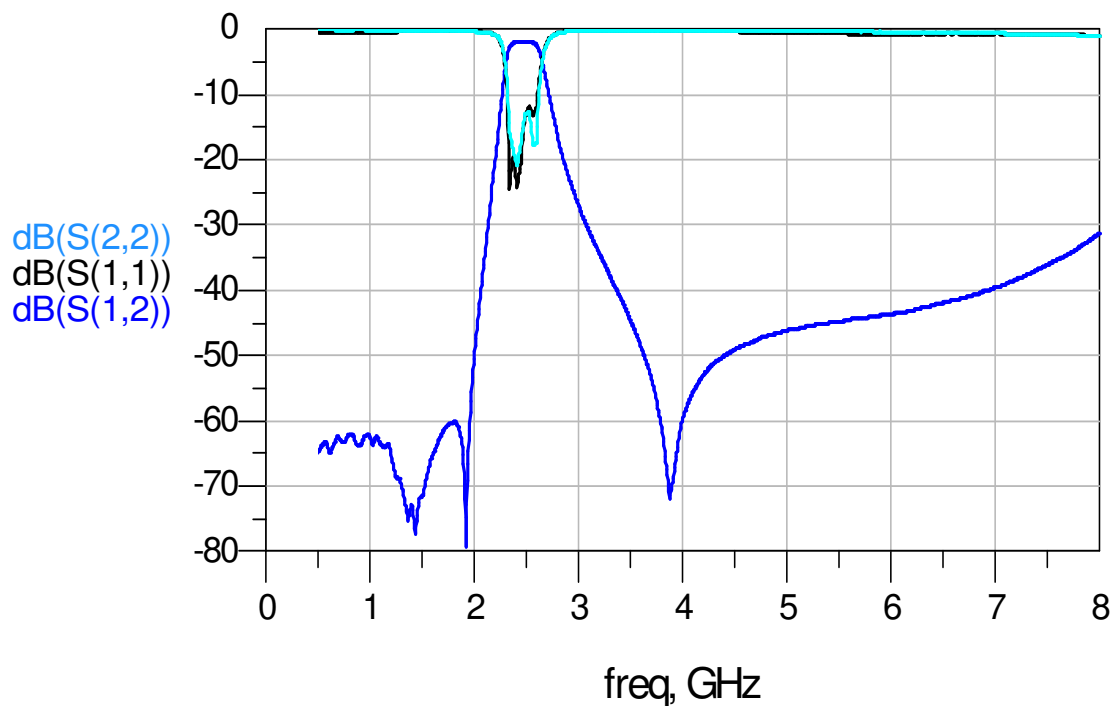
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## Typical Electrical Characteristics (T=25°C)

Insertion Loss & Return loss



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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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