

High Frequency Ceramic Solutions

**Mini Passive RF Diplexer 1.5/2.4/5.4GHz for GPS/WiFi
EIA 0603 with LPF/BPF Filtering Scheme**

P/N 1600DP14B2450

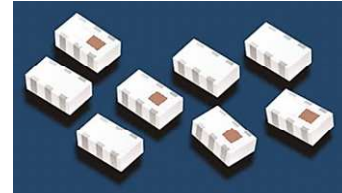
Detail Specification: 2/5/2020

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Not exactly what you are looking for and want to see our other diplexers? Go to: <https://www.johansontechnology.com/diplexers>

General Specifications

Part Number	1600DP14B2450	
Passband (MHz)	1550 - 1580	1594 - 1610
Insertion Loss (dB)	0.47dB typ. (0.6 max.)	0.54 typ. (0.7 max.)
Return Loss (dB)	9.5 min.	
Attenuation (dB)	12 min. @ 2400 - 2500 MHz 12 min. @ 4900 - 6000 MHz	



Passband (MHz)	2400 - 2500	4900 - 6000
Insertion Loss (dB)	0.57dB typ. (0.7 max.)	0.43 typ. (0.6 max.)
Return Loss (dB)	9.5 min.	
Attenuation (dB)	20 min. @ 1550 - 1610 MHz	

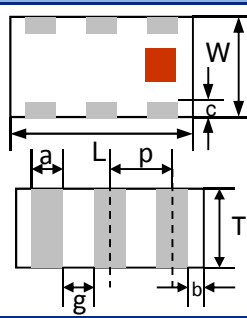
Recommended Storage Conditions of unused product on T&R	+5 to +35°C Humidity 45~75%RH 18 months max.
Operating Temp. Range	-40 to +85 °C
Power Capacity	2W max. (CW)
Reel Quantity	4,000

Part Number Explanation

P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 1600DP14B2450S
		T & R	Suffix = T	eg. 1600DP14B2450T
	Termination style	100% Tin	Suffix = None	eg. 1600DP14B2450(T or S)
	Evaluation Board	1600DP14B2450-EB1SMA		

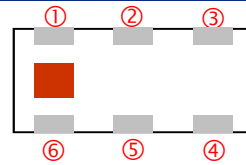
Mechanical Dimensions

	In	mm
L	0.063 ± 0.004	1.6 ± 0.1
W	0.031 ± 0.004	0.8 ± 0.1
T	0.024 ± 0.004	0.6 ± 0.1
a	0.008 ± 0.004	0.2 ± 0.1
b	0.008 +.004/-0.006	0.2 +0.1/-0.15
c	0.006 ± 0.004	0.15 ± 0.1
g	0.012 ± 0.004	0.3 ± 0.1
p	0.020 ± 0.002	0.5 ± 0.05



Terminal Configuration

No.	Function	No.	Function
1	Low Freq Band	4	GND
2	GND	5	Common Port
3	High Freq Band	6	GND



Would you like the layout file for component? Please send us as message at: <https://www.johansontechnology.com/ask-a-question>

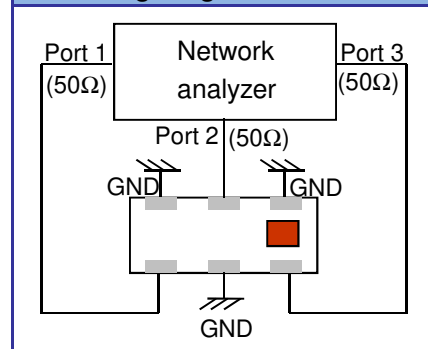
Mounting Considerations

Solder Resist
 Land
 Through-hole (φ0.35)

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

Unit : mm

Measuring Diagram



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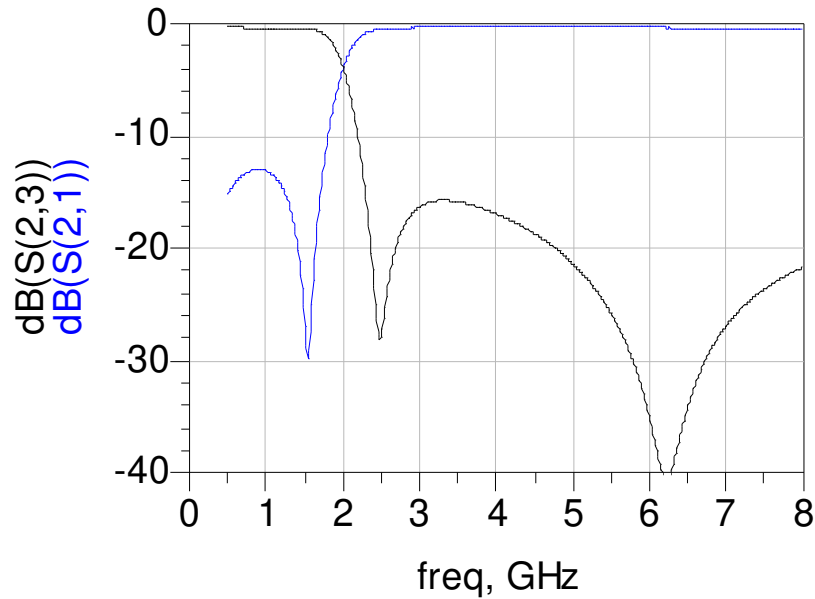
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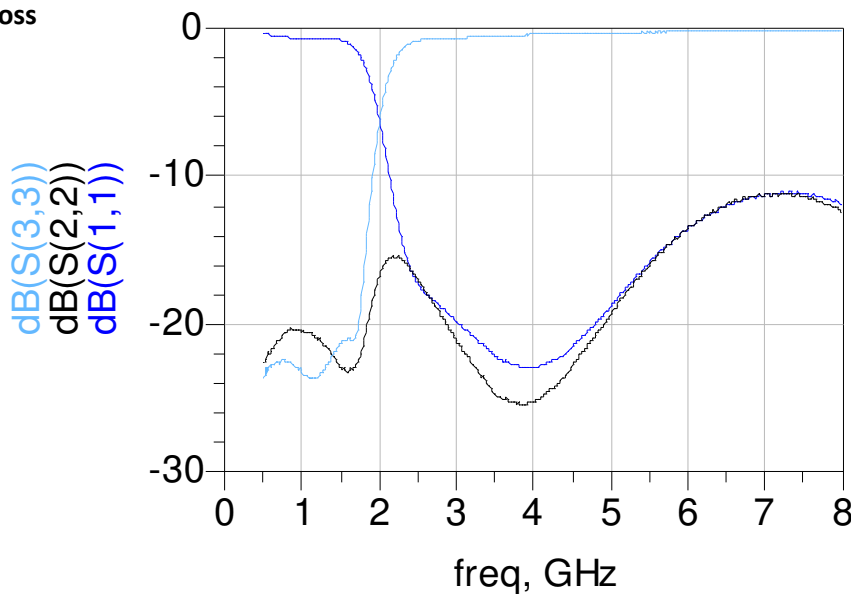
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Typical Electrical Characteristics (T=25 °C)

Attenuation



Return Loss



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<https://www.johansontechnology.com>

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Application Notes, Layout Files, and more

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

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/technical-notes/rohs-compliance>

Antenna layout and tuning techniques

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

Antenna layout review, tuning, and characterization services

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

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