

"High Frequency Ceramic Solutions"

2.4GHz / 5GHz Diplexer, EIA 0603, LGA package

P/N 2450DP14R5400

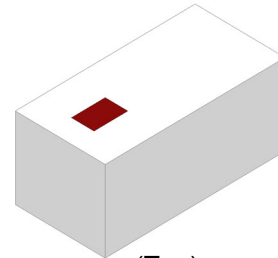
Detail Specification: 10/5/2018

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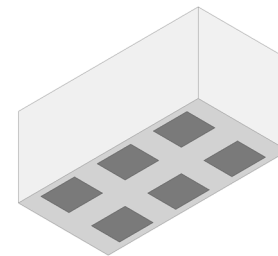
Not exactly what you are looking for and want to see our other diplexers? Go to: <https://www.johansontechnology.com/diplexers>

General Specifications

Part Number	2450DP14R5400	
Passband (GHz)	2.4 - 2.5	4.9 - 5.95
Insertion Loss (dB)	0.64 typ. (0.8 max.)	1.0 typ. (1.4 max.)
Return Loss (dB)	9.5 min.	9.5 min.
Attenuation (dB)	50 typ. (45 min.) @4.8-5.0GHz 34 typ. (30 min.) @7.2-7.5GHz	45 typ. (40 min.) @ 2.4-2.5GHz 26 typ. (22 min.) @ 9.8-11.9GHz
Isolation (dB)	45 typ. (40 min.) @2.4-2.5GHz 45 typ. (40 min.) @4.8-5.0GHz 43 typ. (38 min.) @5.0-6.0GHz	
Power Capacity	3W max. (CW)	
Reel Quantity	4,000	
Operating Temp.	-40 to +85 °C	
Recommended Storage Conditions for Un-used Product on T&R	+5°C to +35°C Humidity 45 - 75% RH 18 months max.	



(Top)



(Bottom)

Part Number Explanation

P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 2450DP14R5400S
		T & R	Suffix = T	eg. 2450DP14R5400T
		Termination style 100% Tin	Suffix = None	eg. 2450DP14R5400(T or S)
	Evaluation Board	2450DP14R5400-EB1SMA		

Would you like the layout file for component?

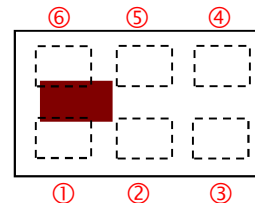
Please send us as message at: <https://www.johansontechnology.com/ask-a-question>

Mechanical Dimensions

	In	mm	
L	0.063 ± 0.004	1.6 ± 0.1	
W	0.031 ± 0.004	0.8 ± 0.1	
T	0.028 max.	0.7 max.	
a	0.012 ± 0.002	0.3 ± 0.05	
b	0.008 ± 0.002	0.2 ± 0.05	
c	0.010 ± 0.002	0.25 ± 0.05	
d	0.008 ± 0.002	0.2 ± 0.05	
e	0.006 ± 0.001	0.15 ± 0.025	
f	0.002 ± 0.001	0.05 ± 0.025	

Terminal Configuration

1	GND	4	Low Freq (2.45GHz) Band
2	Common Port	5	GND
3	GND	6	High Freq (5GHz) Band



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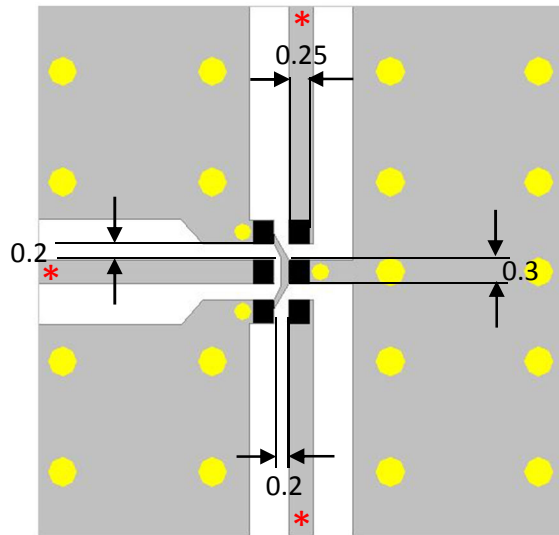
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Mounting Considerations



■ Solder Resist

■ Land

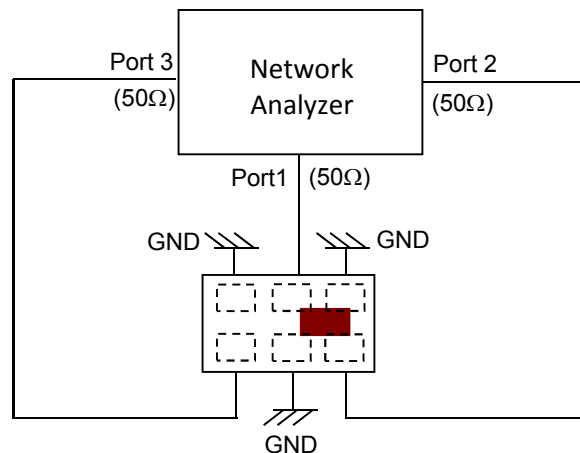
○ Through-hole (ϕ 0.35)

○ Through-hole (ϕ 0.2)

* Line width should be designed to maintain 50 Ω characteristic impedance (CPWG preferred), depending on PCB material and thickness.

Units in mm

Measuring Diagram



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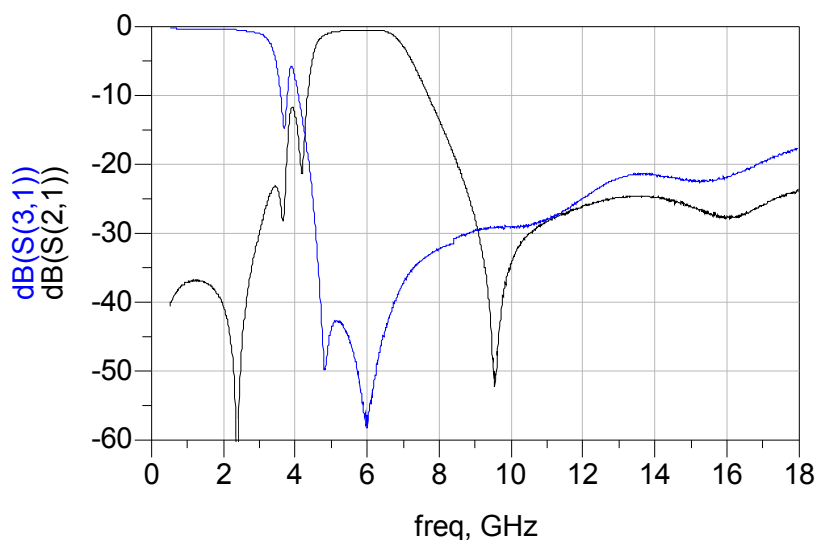
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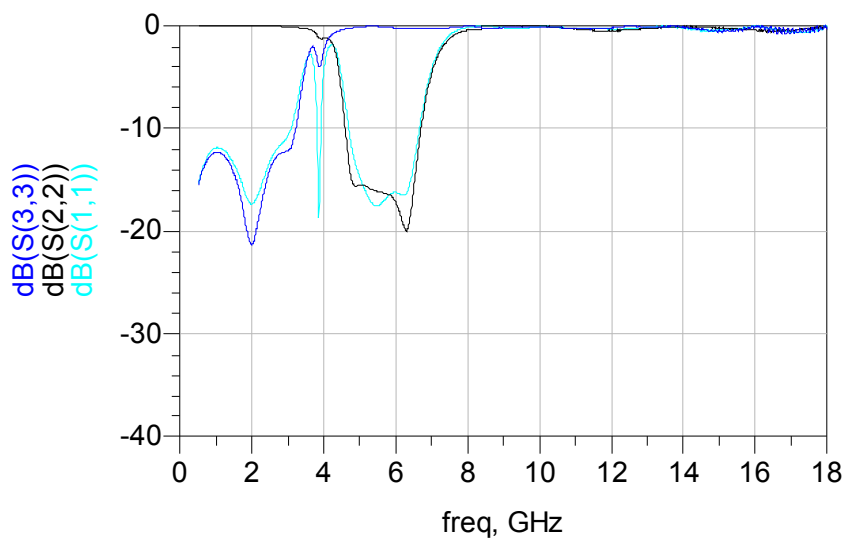
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Typical Electrical Characteristics (T=25 °C)

Attenuation



Return Loss



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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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