

"High Frequency Ceramic Solutions"

Mini Passive RF Diplexer 2.4/5.4GHz for 802.11-WLAN-WiFi

P/N 2450DP14C5400

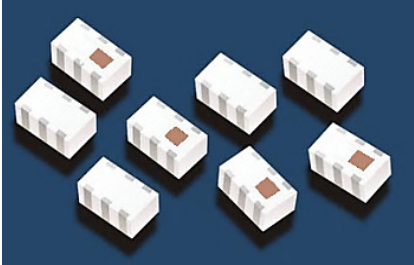
EIA 0603 with LPF/BPF Filtering Scheme

Detail Specification: 9/25/2014

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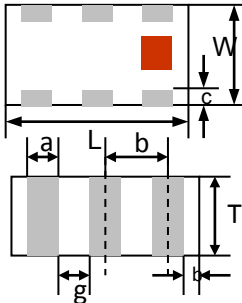
Not exactly what you are looking for and want to see our other diplexers? Go to: www.johansontechnology.com/diplexers

General Specifications

Part Number	2450DP14C5400		
Passband (MHz)	2400~2500	4900~5900	
Insertion Loss (dB)	0.8 max.	1.2 max.	
Attenuation I (db)	18 min. @ 4.8 ~ 6.0 GHz	18 min. @ 2.4 ~ 2.5 GHz	
Attenuation II (db)	20 min. @ 7.2 to 7.5GHz	18 min. @ 9.8 to 11.8GHz	
Passband VSWR	2.0 max.	2.0 max.	
Operating Temp. Range	-40 to +85 °C		
Recom. Storage Conditions¹	+5 to +35 °C, Humidity 45~75%RH		
Storage Period	18 months max.		
Power Capacity	2W max. (CW)		
Reel Quantity	4,000		

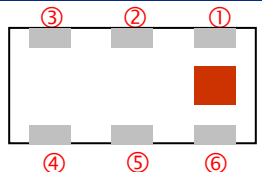
¹This applies on to pre-installation storage (i.e. still on T&R)

Mechanical Dimensions

	In	mm	
L	0.063 ± 0.004	1.6 ± 0.1	
W	0.031 ± 0.004	0.8 ± 0.1	
T	0.016 ± 0.004	0.4 ± 0.1	
a	0.008 ± 0.004	0.2 ± 0.1	
b	0.008 ± .004/.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

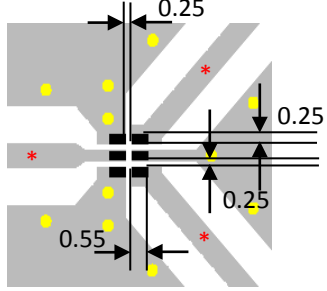
No.	Function	No.	Function
1	High Freq (5.4GHz) Band	4	GND
2	GND	5	Common Port
3	Low Freq (2.45GHz) Band	6	GND



Part Number Explanation

P/N Suffix	Packing Style	Bulk	Suffix = S	eg. 2450DP14C5400S
		T & R	Suffix = E	eg. 2450DP14C5400T
	Termination style	100% Tin	Suffix = None	eg. 2450DP14C5400(T or S)
	Evaluation Board	2450DP14C5400-EB1SMA		

Mounting Considerations

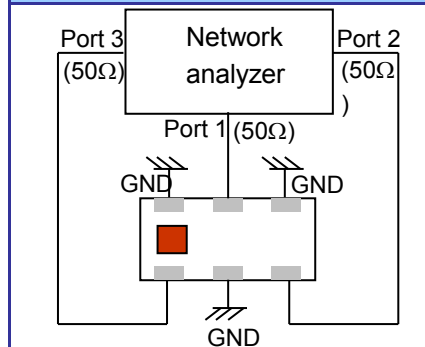


- Solder Resist
- Land
- Through-hole (φ 0.35)

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

Need the layout file of the above? Send us a message at: <http://www.johansontechnology.com/component/techquestion>

Measuring Diagram



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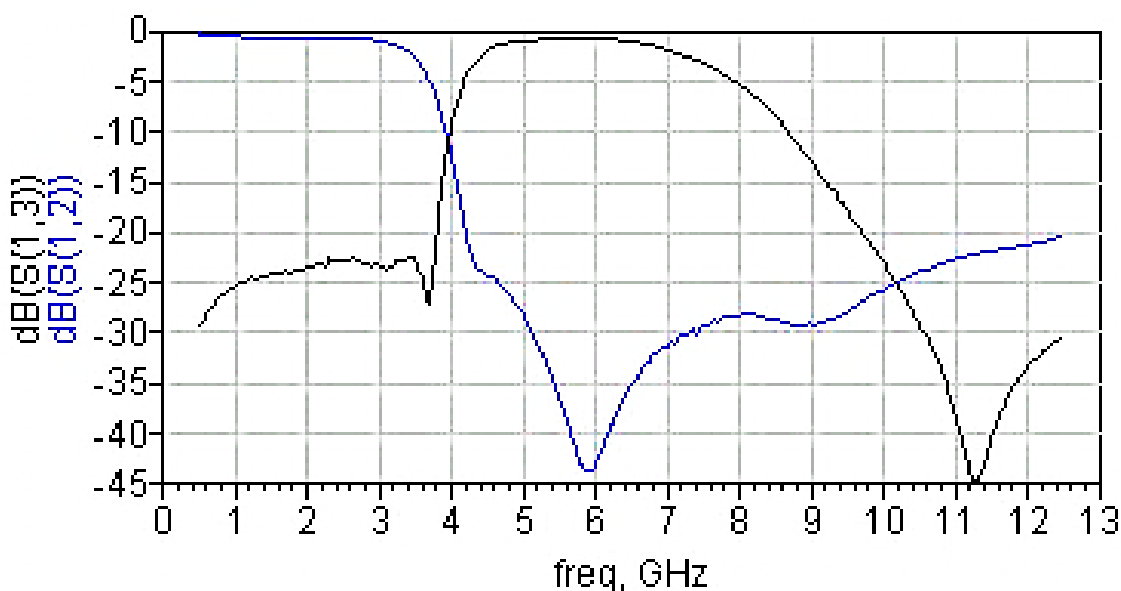
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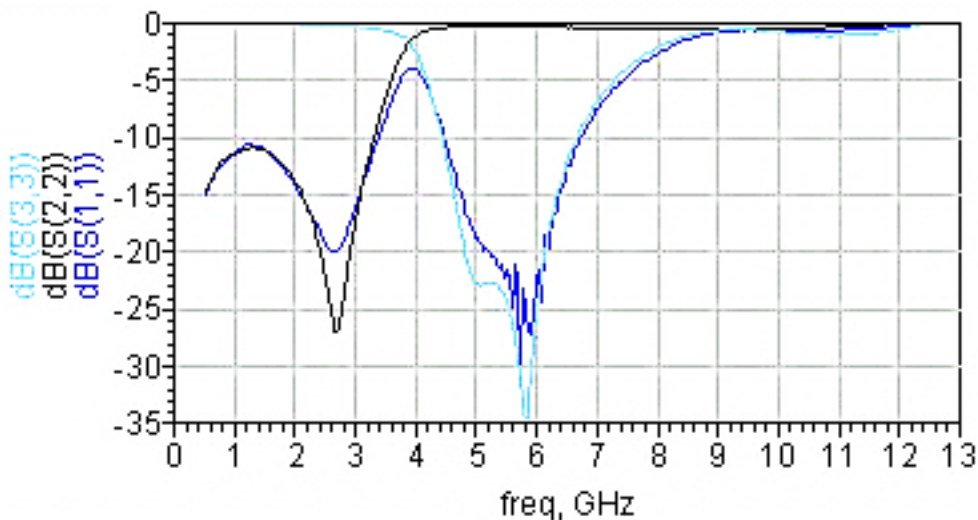
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Typical Electrical Characteristics (T=25 °C)

Attenuation



Return Loss



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RoHS Compliance

www.johansontechnology.com/technical-notes/rohs-compliance.html

Packaging information

www.johansontechnology.com/ipcpackaging.html

Soldering Information

www.johansontechnology.com/ipcsoldering-profile

Layout Files, s-parameters and any other technical questions

www.johansontechnology.com/component/techquestion/?Itemid=407

MSL Info

www.johansontechnology.com/technical-notes/msl-rating.html

Recommended Storage Condition and Max Shelf Life

www.johansontechnology.com/ipcstorage-shelflife

Antenna layout and tuning techniques

www.johansontechnology.com/tuning

Antenna layout review, tuning, and characterization services

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