

# "High Frequency Ceramic Solutions"

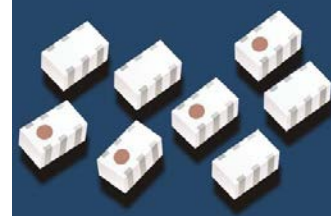
## 2.45 / 5.4GHz Low Loss Ceramic Chip Diplexer (LPF/BPF type) P/N 2450DP15L5400

Spec. Release Date: 02/24/17

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### General Specifications

<b>Part Number</b>		2450DP15L5400		
<b>Passband (MHz)</b>	<b>Insertion Loss (dB)</b>	<b>Attenuation</b>	<b>Return Loss (dB)</b>	<b>Isolation (dB)</b>
2400~2500	0.25 typ. (0.5 max.)	20dB min. (27 typ.) @4.8-6.0GHz	10 min. (20 typ.)	20 min. (22 typ.) @2.4-2.5GHz
		20dB min. (30 typ.) @7.2-7.5GHz		
4900~5950	0.35 typ. (0.65 max.)	20dB min. (23 typ.) @ 0.8-2.5GHz	10 min. (15 typ.)	20 min. (27 typ.) @4.9-5.95GHz
		15dB min. (18typ.) @9.8-11.9GHz		
<b>Impedance for all I/O ports</b>		50 Ω		
<b>Operating Temp/Post-Installation Storage Temperature</b>			+5 to +35°C, Humidity 45~75%RH, 18 mos max	
<b>Storage Temp (unused product on T&amp;R)</b>			-40 to +85°C	
<b>Input Power</b>		2W max (CW)	<b>Reel Quantity</b>	4000 pcs



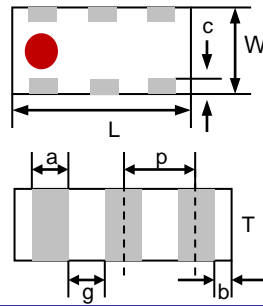
Note: This component is identical to p/n: 2450DP15K5400 except that the 2.4G and 5G pins are swapped in functionality and has a round top red mark for distinction.

### Part Number Explanation

<b>P/N Suffix</b>	<b>Packing Style</b>	Bulk	Suffix = S	eg. 2450DP15L5400S
		T & R	Suffix = E	eg. 2450DP15L5400E
	Termination style	Ni/Sn	Suffix = None	eg. 2450DP15L5400S(E or S)
	<b>Evaluation Board</b>	2450DP15L5400-EB1SMA (3-port PCB with 50ohm SMA connectors)		

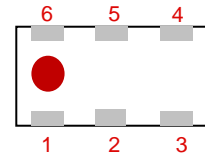
### Mechanical Dimensions

	In	mm
L	0.079 ± 0.004	2.00 ± 0.10
W	0.049 ± 0.004	1.25 ± 0.10
T	0.020 ± 0.004	0.50 ± 0.10
a	0.012 ± 0.004	0.30 ± 0.10
b	0.008 ± 0.004	0.20 ± 0.10
c	0.012 +.004/-0.008	0.30 +0.1/-0.2
g	0.014 ± 0.004	0.35 ± 0.10
p	0.026 ± 0.002	0.65 ± 0.05



### Terminal Configuration

No.	Function	No.	Function
1	GND	4	Higher Freq. Port
2	Common Port	5	GND
3	GND	6	Lower Freq. Port



### Mounting Considerations and appearance

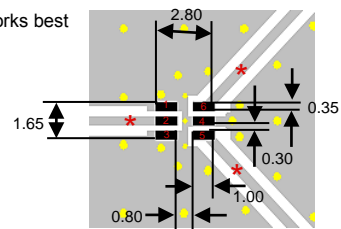
\* Line width should be designed to provide 50Ω impedance matching characteristics. CPWG style works best

Need the layout file of this diplexer? Send us a message at:

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Do you need some measured s-parameters? Send us a message at the link above.

- Solder Resist
  - Land
  - Through-hole (φ 0.35 / 0.20)
- Units: mm



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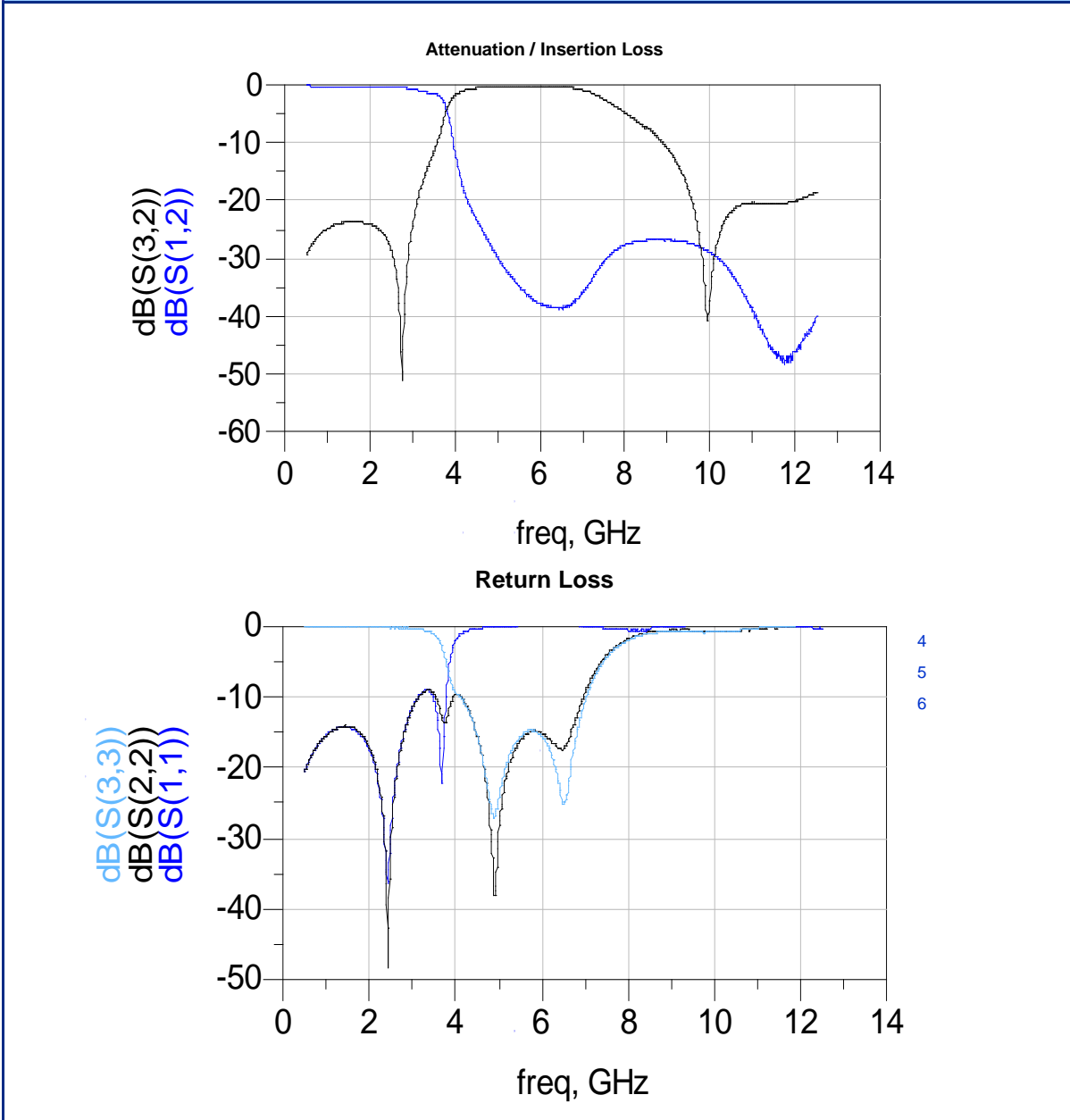
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## Typical Electrical Performance (T=25°C)



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## RoHS Compliance

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

## Packaging information

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

## Soldering Information

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

## Layout Files, s-parameters and any other technical questions

<http://www.johansontechnology.com/ask-a-question>

## MSL Info

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

## Recommended Storage Condition and Max Shelf Life

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

## Antenna layout and tuning techniques

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

## Antenna layout review, tuning, and characterization services

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

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