

High Frequency Ceramic Solutions

5GHz Diplexer for UNII Bands 1 and 3

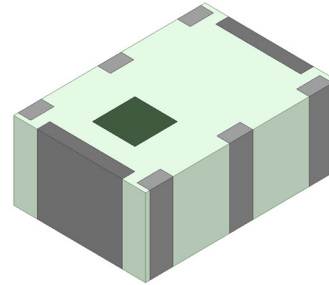
P/N 5200DP44A5800

Detail Specification: 4/26/2021

Page 1 of 4

General Specifications

Part Number	5200DP44A5800
Power Capacity	3W (CW)
Reel Quantity	1000pcs
Operating Temp.	-40°C 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.



Passband (MHz)	Insertion Loss (dB)	Return loss (dB)	Attenuation (dB)
5100 - 5300	1.6 max.	10 min.	20 min. @ 5700 - 5900MHz
5700 - 5900	1.6 max.	10 min.	20 min. @ 5100 - 5300MHz

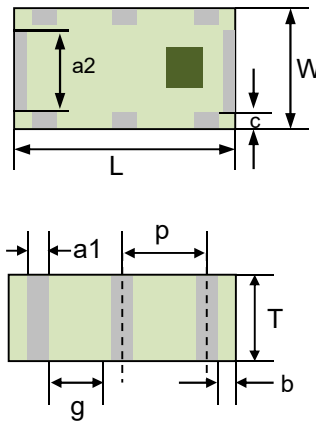
Not exactly what you are looking for and want to see our other diplexers? Go to: <https://www.johansontechnology.com/diplexers>

Part Number Explanation

P/N Suffix	Packing Style	Bulk	Suffix = S	E.g. 5200DP44A5800S
		T & R	Suffix = E	E.g. 5200DP44A5800E
	Termination style	100% Tin	Suffix = None	E.g. 5200DP44A5800 (E or S)
	Evaluation Board	5200DP44A5800-EB1SMA (3 female SMA connectors)		

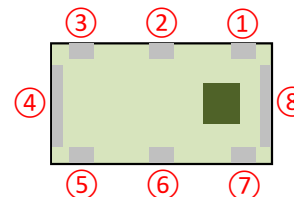
Mechanical Dimensions

	In	mm
L	0.177 ± 0.012	4.5 ± 0.3
W	0.122 ± 0.012	3.1 ± 0.3
T	0.071 max.	1.8 max.
a1	0.022 ± 0.008	0.55 ± 0.2
a2	0.079 ± 0.008	2.0 ± 0.2
b	0.004 min.	0.1 min.
c	0.012 +0.004/-0.008	0.3 +0.1/-0.2
g	0.043 ± 0.006	1.1 ± 0.15
p	0.065 ± 0.008	1.65 ± 0.20



Terminal Configuration

No.	Function
1	GND
2	COMMON PORT
3	GND
4	GND
5	LOW-BAND (5.2GHz)
6	GND
7	HIGH-BAND (5.8GHz)
8	GND



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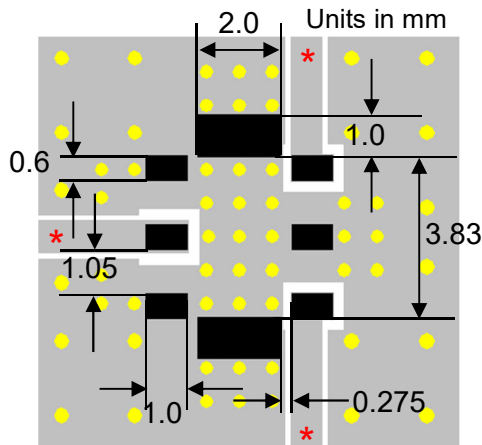
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P/N 5200DP44A5800

Detail Specification: 4/26/2021

Page 2 of 4

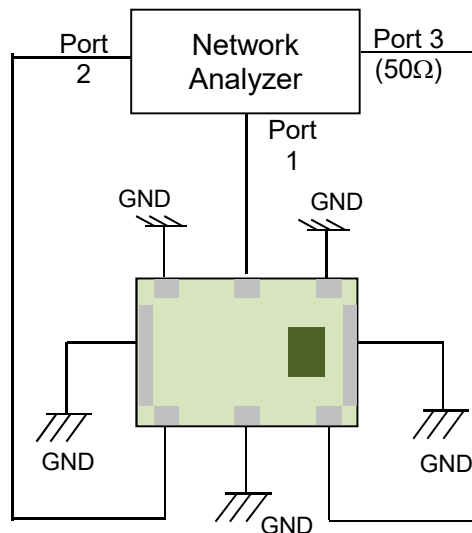
Mounting Considerations



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

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

Measuring Diagram



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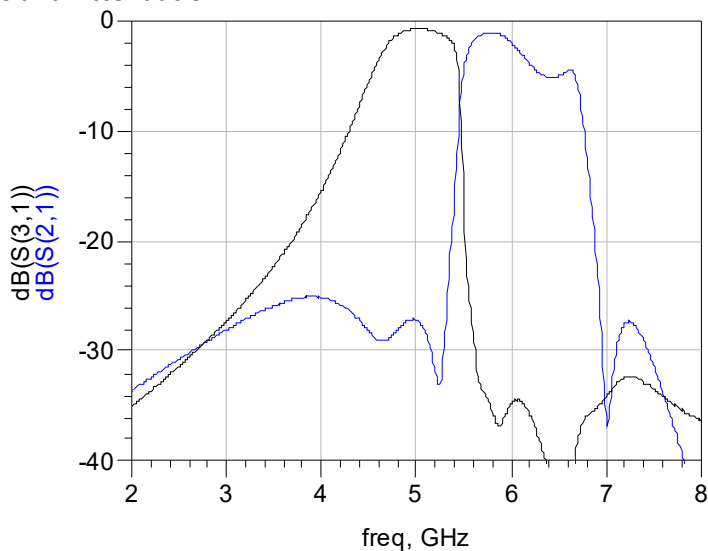
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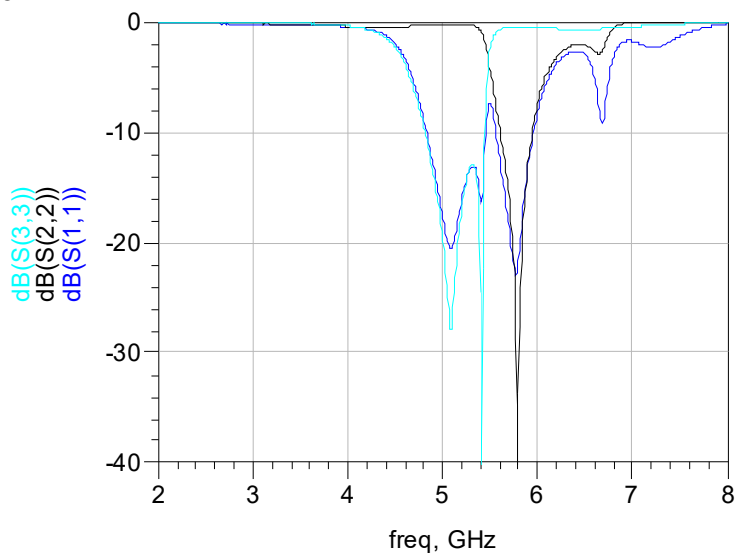
Page 3 of 4

Typical Electrical Characteristics (T=25 °C)

Insertion Loss and Attenuation



Return Loss



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Detail Specification: 4/26/2021

Page 4 of 4

Diplexers

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

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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