

TDK Products for Wireless LAN

2/7/2002

for 5GHz (Wide Band)

Multilayer Band Pass Filter

Start Freq. MHz	Stop Freq. MHz	Ins. Loss dB (MAX)	Atenuation (Typ.)						Size mm (typ.)	Part No.
			MHz	dB	MHz	dB	MHz	dB		
5150	5900	1.5	3450	42	4465	10	6855	12	2.0x1.2x1.0	DEA205437BT-1200
4900	5950	1.5	3450	32	4465	5	6855	8	2.0x1.2x1.0	DEA205425BT-1209
5100	5825	1.9	3500	32	4465	9	6855	9	2.0x1.2x1.0	DEA205462BT-2023
5150	5875	2.0	3450	38	4465	30	6855	5	2.0x1.2x1.0	DEA205462BT-2025
4900	5950	2.0	3450	48	4465	14	6855	13	2.0x1.2x1.0	DEA205425BT-2028B1
5100	5825	2.2	3450	50	4465	10	6855	5	1.6x0.8x0.6	DEA165487BT-1202

Block Band Pass Filter

Start Freq. MHz	Stop Freq. MHz	Ins. Loss dB (MAX)	Atenuation (Typ.)						Size mm (typ.)	Part No.
			MHz	dB	MHz	dB	MHz	dB		
5150	5850	1.0	3700	32	4600	17	7000	22	3.0x3.0x1.8	CF61A4401
5150	5850	2.0	3700	35	4600	29	7000	26	4.3x3.0x2.0	CF61A4501
5150	5825	1.2	3700	26	4600	10	7000	28	3.2x3.1x1.8	CF61A4901

for 5.8GHz

Block Band Pass Filter

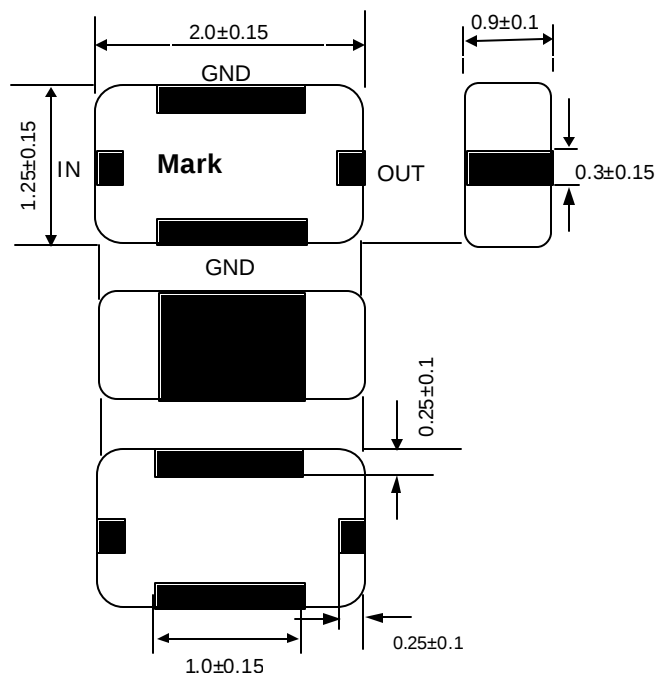
Center Freq. MHz	Band Width MHz	Ins. Loss dB (MAX)	Atenuation (Typ.)						Size mm (typ.)	Part No.
			MHz	dB	MHz	dB	MHz	dB		
5800	150	2.0	5425	20	5625	2	6175	8	4.2x2.0x2.0	S0354
5800	150	3.4	5425	22	5625	13	6175	17	3.0x4.3x2.0	S0356

	Sample Available
	Under developing

MULTILAYER BAND PASS FILTER

P/N: **DEA205437BT-1200** For 5.0GHz W-LAN

MECHANICAL DIMENSIONS



Note: These samples are marked with a trial sample identification. This applies for these samples only.
In mass production, this sample marking will be changed to show in the TDK full specification.

ELECTRICAL CHARACTERISTICS (at 25 °C)

No.	PARAMETER	Frequency (MHz)	MIN.	TYP.	MAX.	Unit
1	CENTER FREQUENCY	5525	-	-	-	-
2	INSERTION LOSS	5150 – 5900	-	1.1	1.5	dB
3	RETURN LOSS	5150 – 5900	10.0	-	-	dB
4	ATTENUATION	3450	35.0	-	-	dB

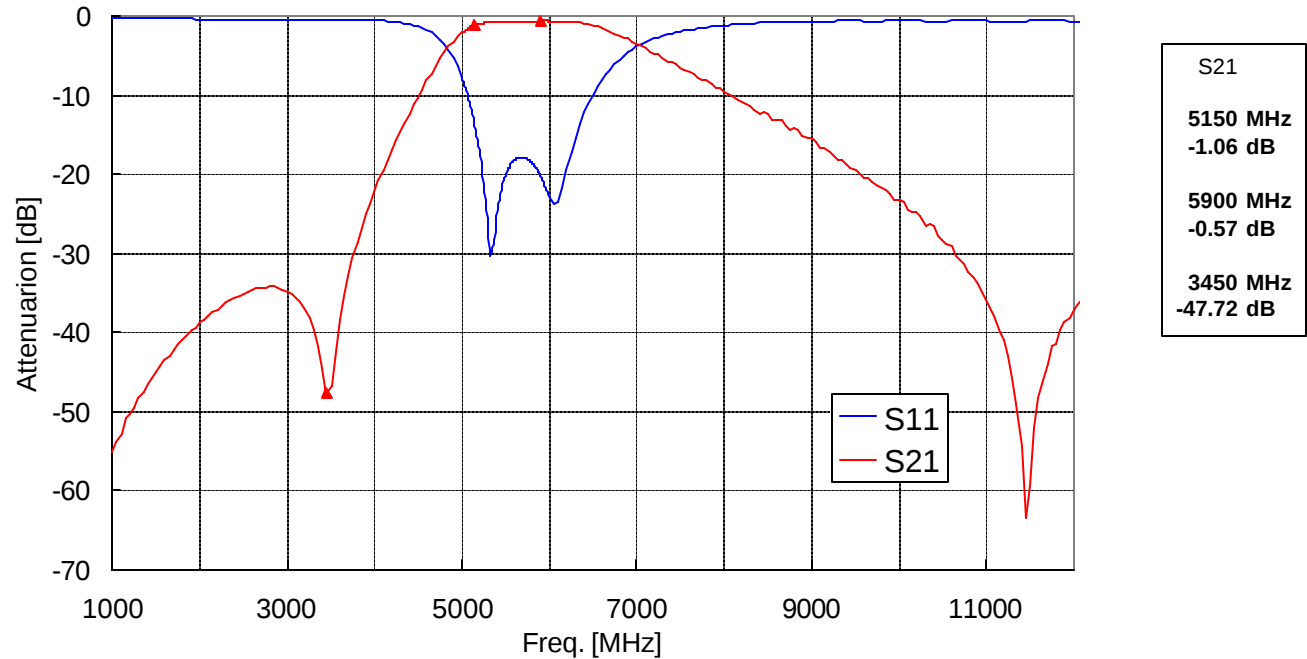
TEMPERATURE RANGE

Storage Temperature	-40 ~ +85 °C
Operating Temperature	-40 ~ +85 °C

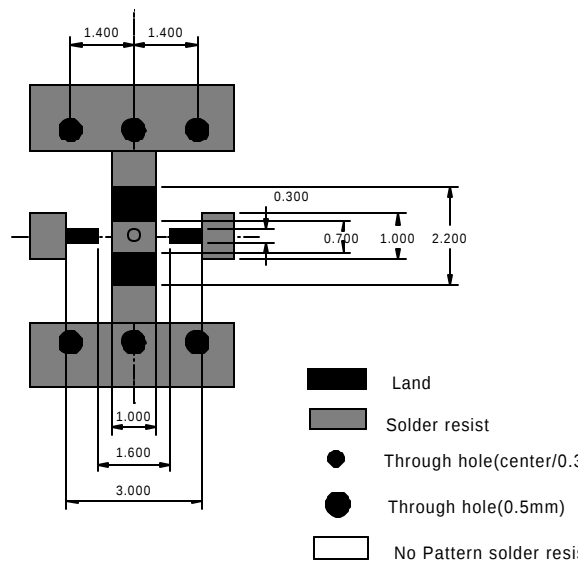
Note: This document is PRELIMINARY. All specifications are subject to change and are not guaranteed.

FREQUENCY CHARACTERISTICS

DEA205437BT-1200



RECOMMENDED LAND PATTERN



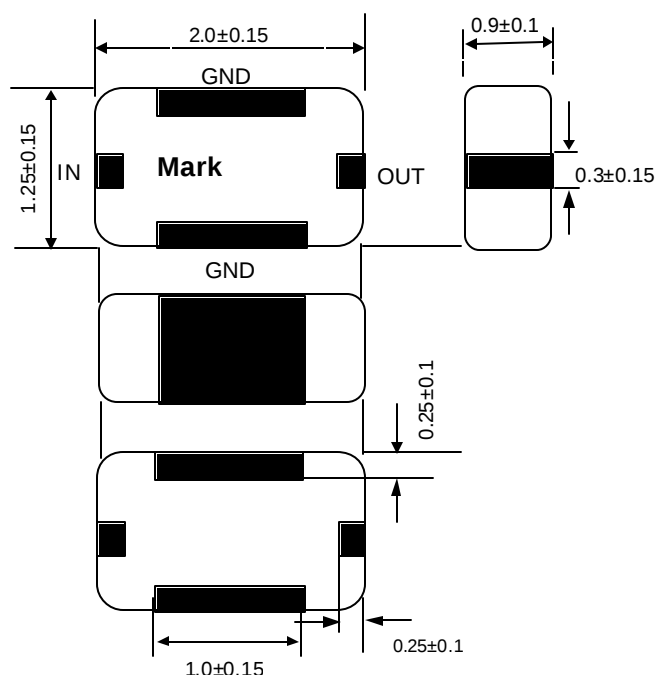
*Line width be designed to match 50ohm characteristic impedance, depending on PCB material and thickness.

Notes All the technical data and information contained herein are subject to change without prior notice.

MULTILAYER BAND PASS FILTER

P/N: **DEA205425BT-1209B2** For 5.0GHz W-LAN

MECHANICAL DIMENSIONS



Note: These samples are marked with a trial sample identification. This applies for these samples only.
In mass production, this sample marking will be changed to show in the TDK full specification.

ELECTRICAL CHARACTERISTICS (at 25 °C)

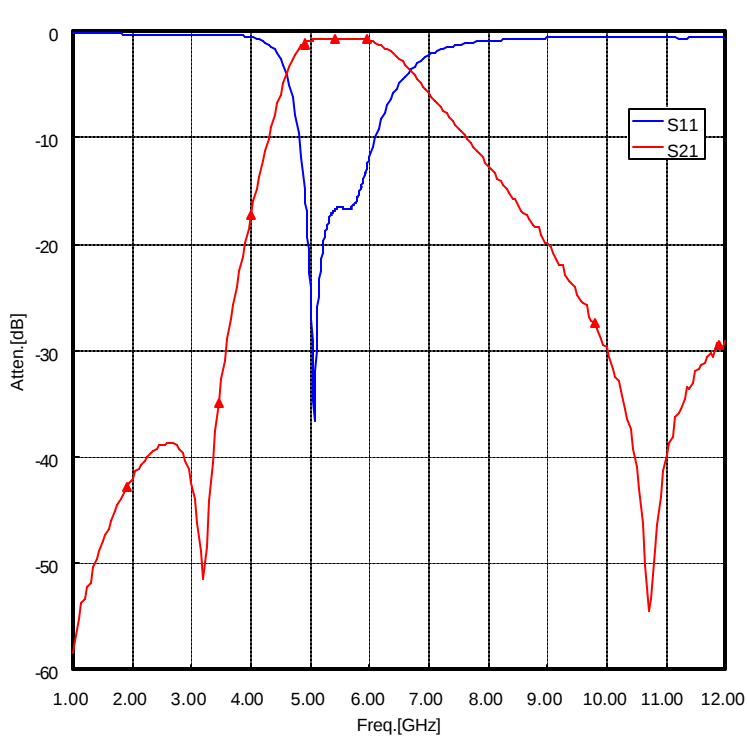
No.	PARAMETER	Frequency (MHz)	MIN.	TYP.	MAX.	Unit
1	CENTER FREQUENCY	5425	-	-	-	-
2	INSERTION LOSS	4900 – 5950	-	1.1	1.5	dB
3	RETURN LOSS	4900 – 5950	10.0	-	-	dB
4	ATTENUATION	500 – 1900	35	41	-	dB
5	ATTENUATION	2140 – 3300	30	38	-	dB
6	ATTENUATION	3450	25.0	34	-	dB
7	ATTENUATION	9800 – 11900	17	25	-	dB

TEMPERATURE RANGE

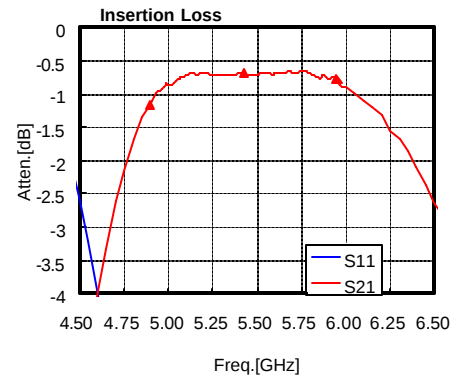
Storage Temperature	-40 ~ +85 °C
Operating Temperature	-40 ~ +85 °C

Note: This document is PRELIMINARY. All specifications are subject to change and are not guaranteed.

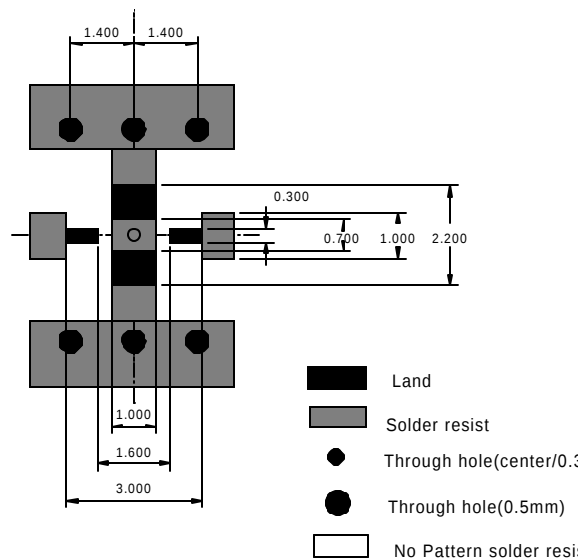
FREQUENCY CHARACTERISTICS



S21	
4.9 GHz	-1.17 dB
5.43 GHz	-0.69 dB
5.95 GHz	-0.78 dB
1.9 GHz	-42.74 dB
3.45 GHz	-34.91 dB
4.0 GHz	-17.29 dB
9.8 GHz	-27.41 dB
11.9 GHz	-29.51 dB



RECOMMENDED LAND PATTERN



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

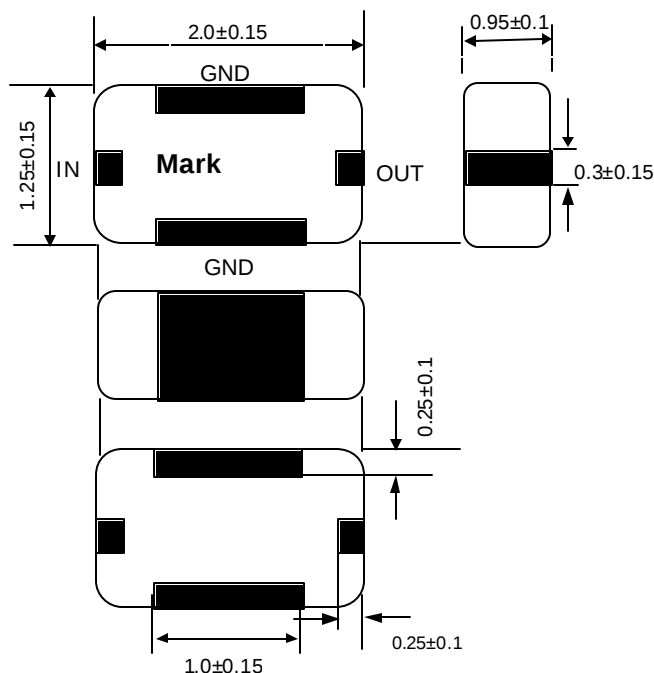
Notes: All the technical data and information contained herein are subject to change without prior notice.

MULTILAYER BAND PASS FILTER

P/N: **DEA205462BT-2023**

For 5.0GHz W-LAN

MECHANICAL DIMENSIONS



Note: These samples are marked with a trial sample identification. This applies for these samples only.
In mass production, this sample marking will be changed to show in the TDK full specification.

ELECTRICAL CHARACTERISTICS (at 25 °C)

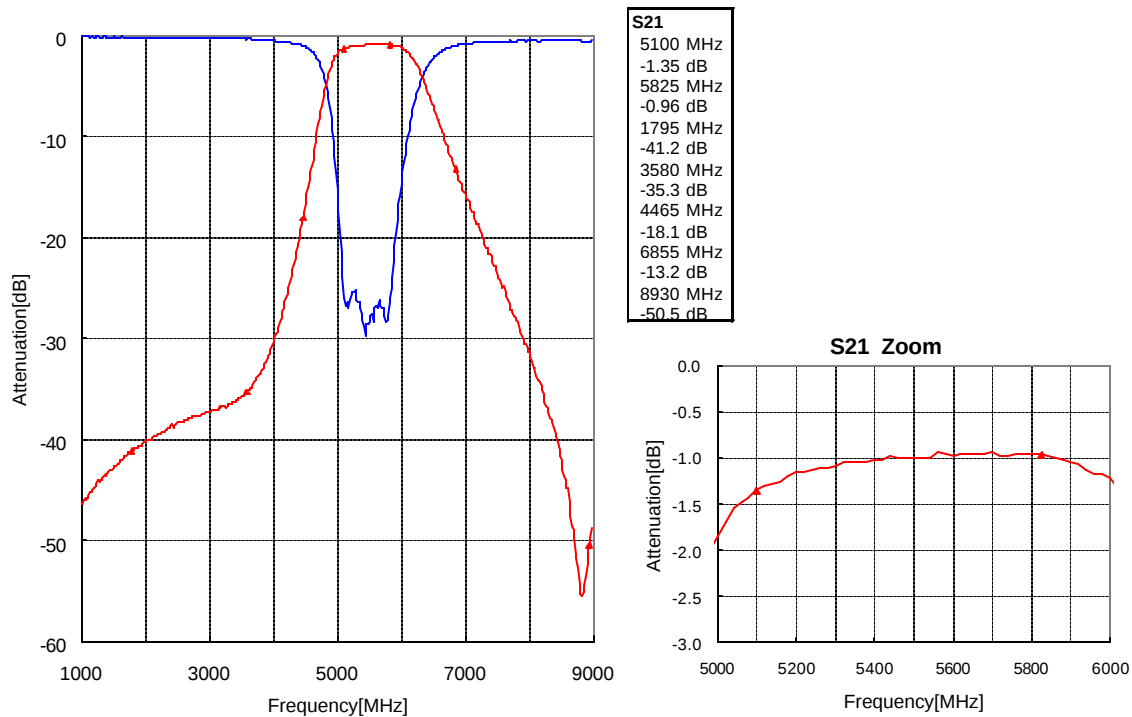
No.	PARAMETER	Frequency (MHz)	MIN.	TYP.	MAX.	Unit
1	CENTER FREQUENCY	5462.5	-	-	-	-
2	INSERTION LOSS	5100 – 5825	-	1.5	1.9	dB
3	RETURN LOSS	5100 – 5825	10	13	-	dB
4	ATTENUATION	1280 – 1795	37	40	-	dB
5	ATTENUATION	2140 – 3580	32	35	-	dB
6	ATTENUATION	4375 – 4465	9	13	-	dB
7	ATTENUATION	6855 – 7150	9	14	-	dB
8	ATTENUATION	8570 – 8930	20	37	-	dB

TEMPERATURE RANGE

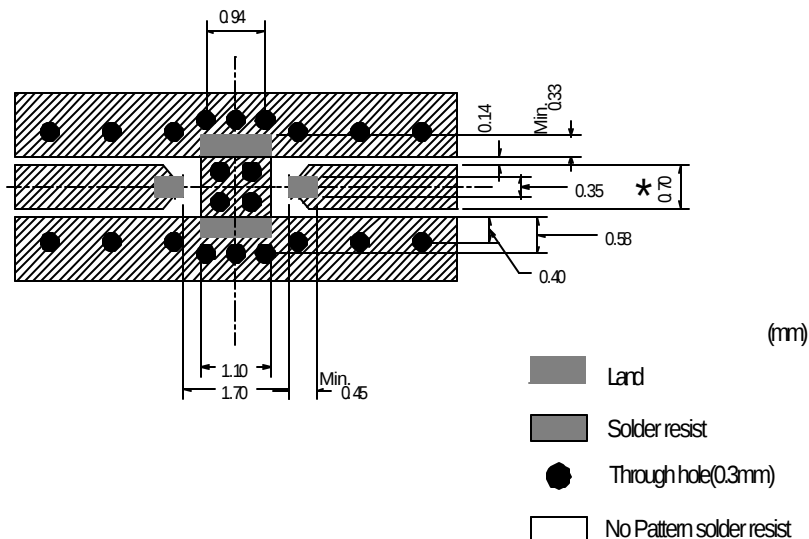
Storage Temperature	-40 ~ +85 °C
Operating Temperature	-40 ~ +85 °C

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FREQUENCY CHARACTERISTICS

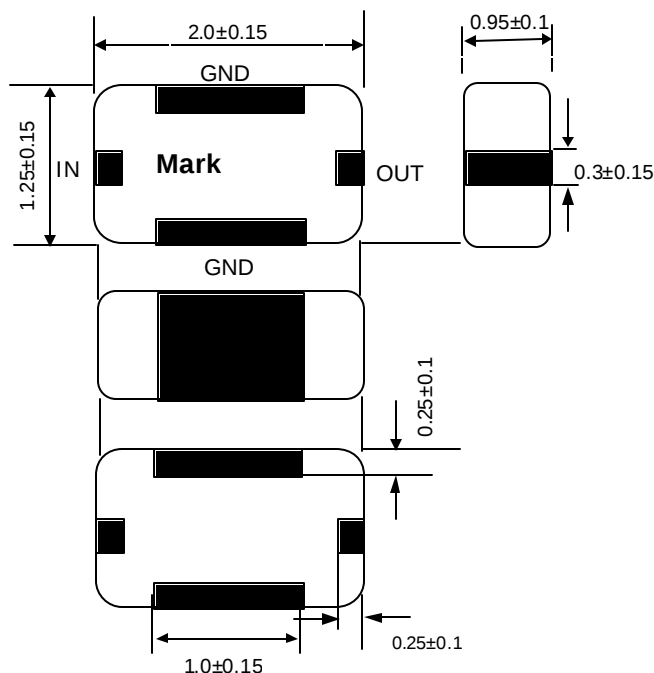


RECOMMENDED LAND PATTERN



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

Notes: All the technical data and information contained herein are subject to change without prior notice.

MULTILAYER BAND PASS FILTERP/N: **DEA205512BT-2025****For 5.0GHz W-LAN****MECHANICAL DIMENSIONS**

Note: These samples are marked with a trial sample identification. This applies for these samples only.
In mass production, this sample marking will be changed to show in the TDK full specification.

ELECTRICAL CHARACTERISTICS (at 25 °C)

No.	PARAMETER	Frequency (MHz)	MIN.	TYP.	MAX.	Unit
1	CENTER FREQUENCY	5512.5	-	-	-	-
2	INSERTION LOSS	5150 – 5875	-	1.5	2.0	dB
3	VSWR	5150 – 5875	-	1.25	2.0	-
4	ATTENUATION	4000 – 4120	25	40	-	dB
5	ATTENUATION	4280	35	40	-	dB
6	ATTENUATION	4580 – 4600	15	20	-	dB
7	ATTENUATION	4660	10	15	-	dB
8	ATTENUATION	10300 – 11750	10	20	-	dB

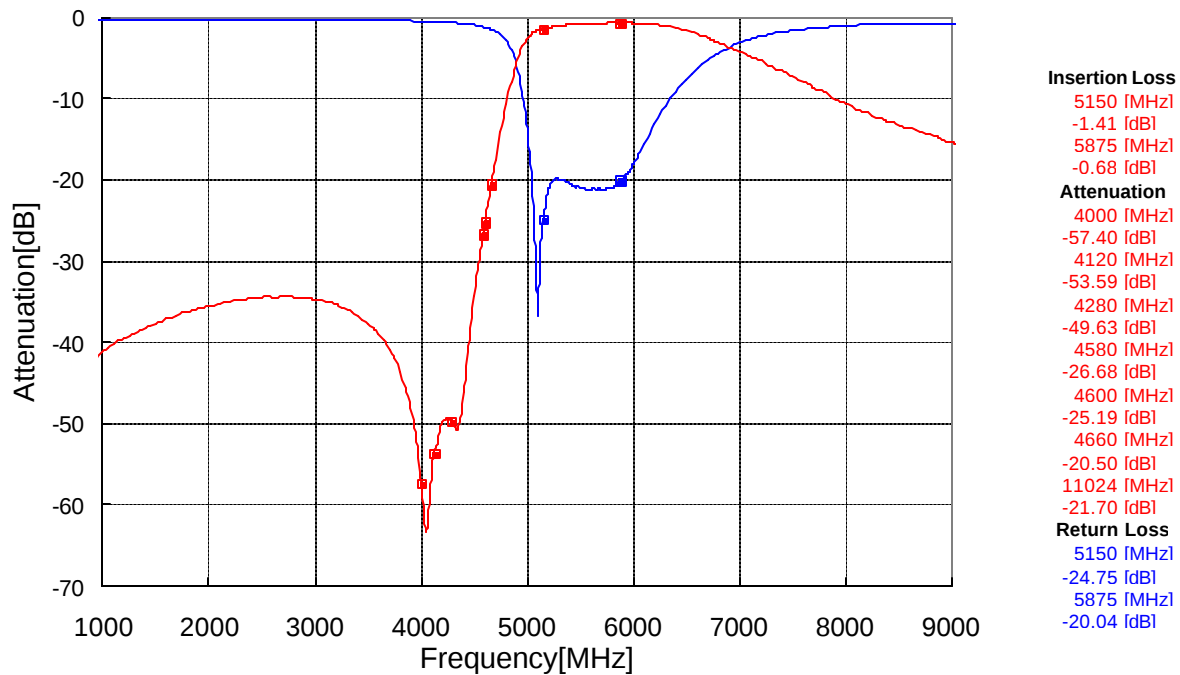
TEMPERATURE RANGE

Storage Temperature	-40 ~ +85 °C
Operating Temperature	-40 ~ +85 °C

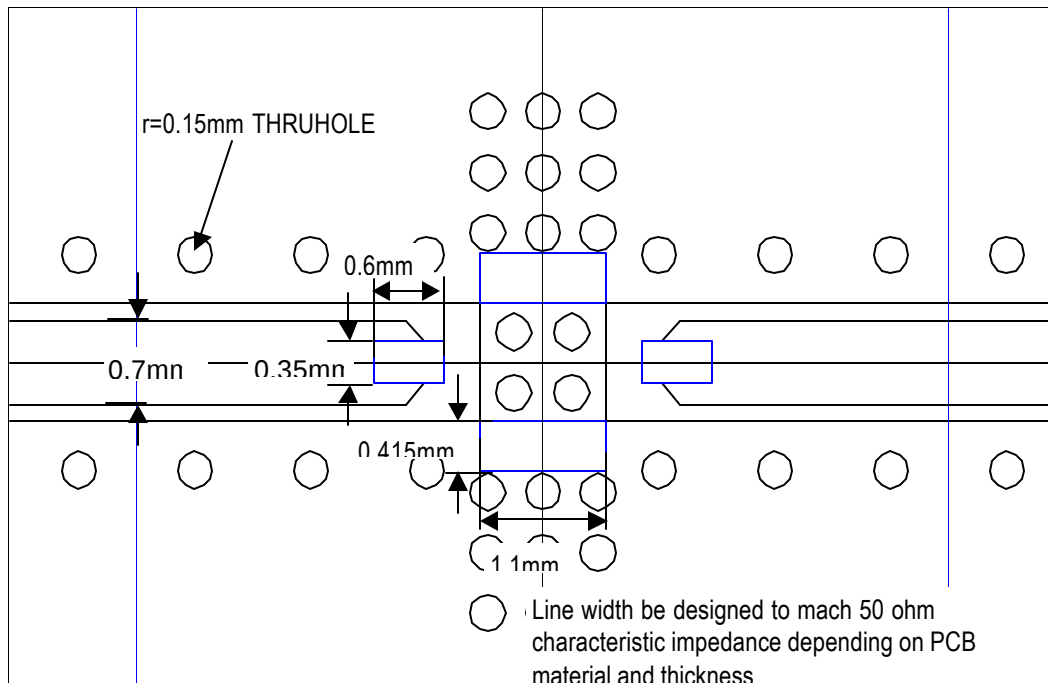
Note: This document is PRELIMINARY. All specifications are subject to change and are not guaranteed.

FREQUENCY CHARACTERISTICS

DEA205512BT-2025



RECOMMENDED LAND PATTERN

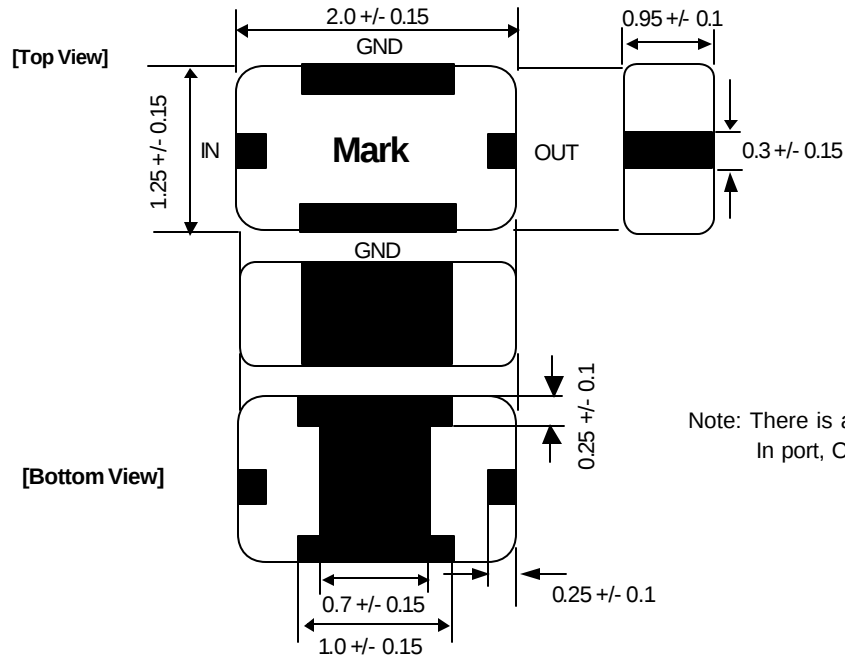


Note: This document is PRELIMINARY. All specifications are subject to change and are not guaranteed.

MULTILAYER BAND PASS FILTER

P/N: **DEA205425BT-2028B1** For 5.0GHz W-LAN

MECHANICAL DIMENSIONS



Note: These samples are marked with a trial sample identification. This applies for these samples only.
In mass production, this sample marking will be changed to show in the TDK full specification.

ELECTRICAL CHARACTERISTICS (at 25 °C)

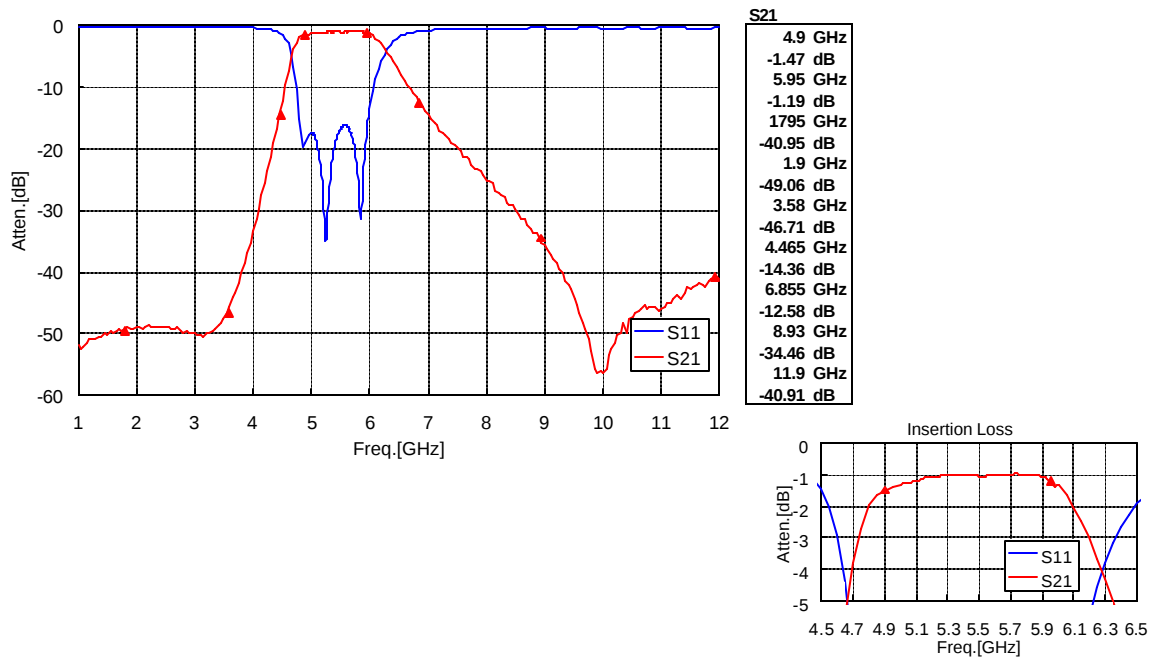
No.	PARAMETER	Frequency (MHz)	MIN.	TYP.	MAX.	Unit
1	CENTER FREQUENCY	5425	-	-	-	-
2	INSERTION LOSS	4900 – 5950	-	-	2.0	dB
3	RETURN LOSS	4900 – 5950	9	-	-	dB
4	ATTENUATION	1280 – 1795	37	-	-	dB
5	ATTENUATION	1900	45	-	-	dB
6	ATTENUATION	2140 – 3580	32	-	-	dB
7	ATTENUATION	4375 – 4465	8	-	-	dB
8	ATTENUATION	6855 – 7150	9	-	-	dB
9	ATTENUATION	8570 – 8930	20	-	-	dB
10	ATTENUATION	9800 – 11900	25	-	-	dB

TEMPERATURE RANGE

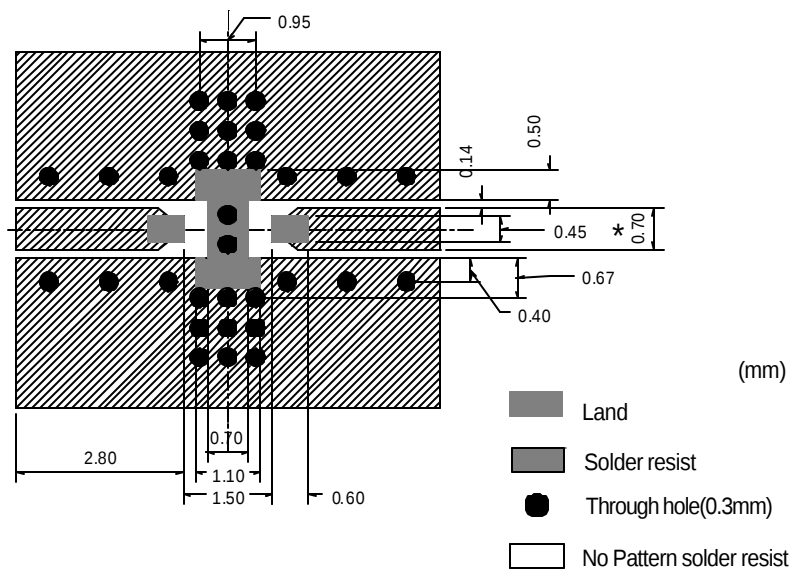
Storage Temperature	-40 ~ +85 °C
Operating Temperature	-40 ~ +85 °C

Note: This document is PRELIMINARY. All specifications are subject to change and are not guaranteed.

FREQUENCY CHARACTERISTICS

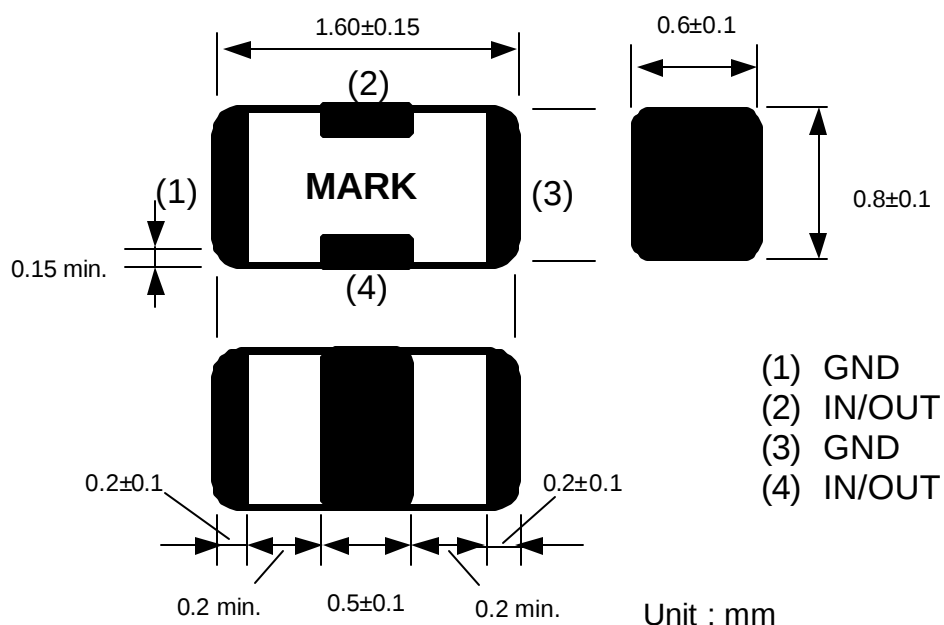


RECOMMENDED LAND PATTERN



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

Notes: All the technical data and information contained herein are subject to change without prior notice.

MULTILAYER BAND PASS FILTERP/N: **DEA165487BT-1202** For 5.0GHz W-LAN**MECHANICAL DIMENSIONS**

Note: These samples are marked with a trial sample identification. This applies for these samples only.
In mass production, this sample marking will be changed to show in the TDK full specification.

ELECTRICAL CHARACTERISTICS (at 25 °C)

No.	PARAMETER	Frequency (MHz)	MIN.	TYP.	MAX.	Unit
1	CENTER FREQUENCY	5525	-	-	-	-
2	INSERTION LOSS	5150 – 5900	-	1.6	2.2	dB
3	RETURN LOSS	5150 – 5900	10.0	-	-	dB
4	ATTENUATION	3450	35.0	-	-	dB

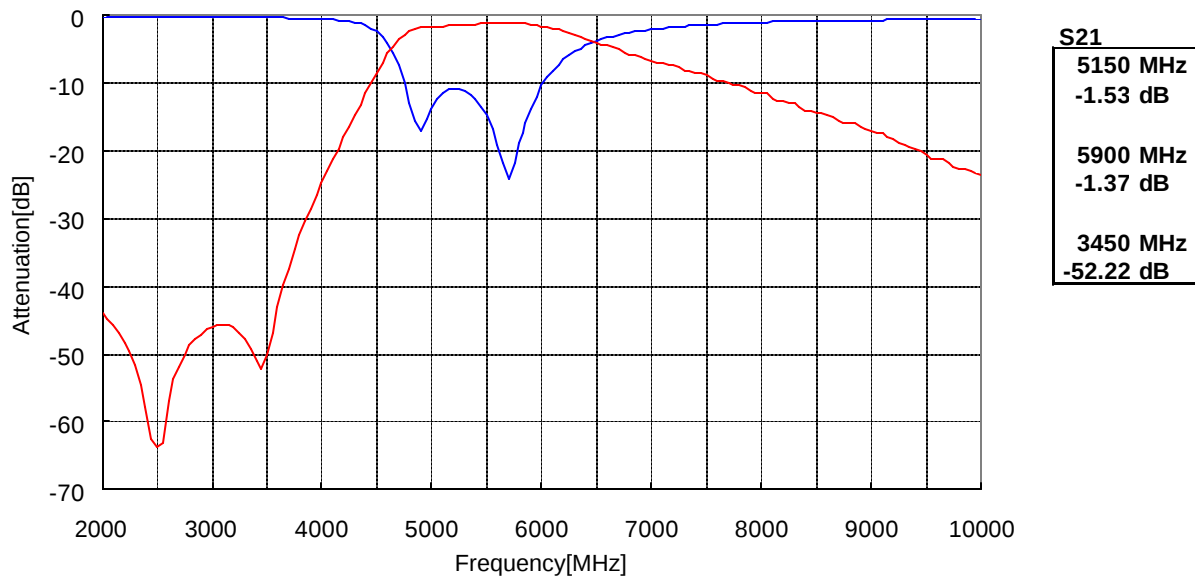
TEMPERATURE RANGE

Storage Temperature	-40 ~ +85 °C
Operating Temperature	-40 ~ +85 °C

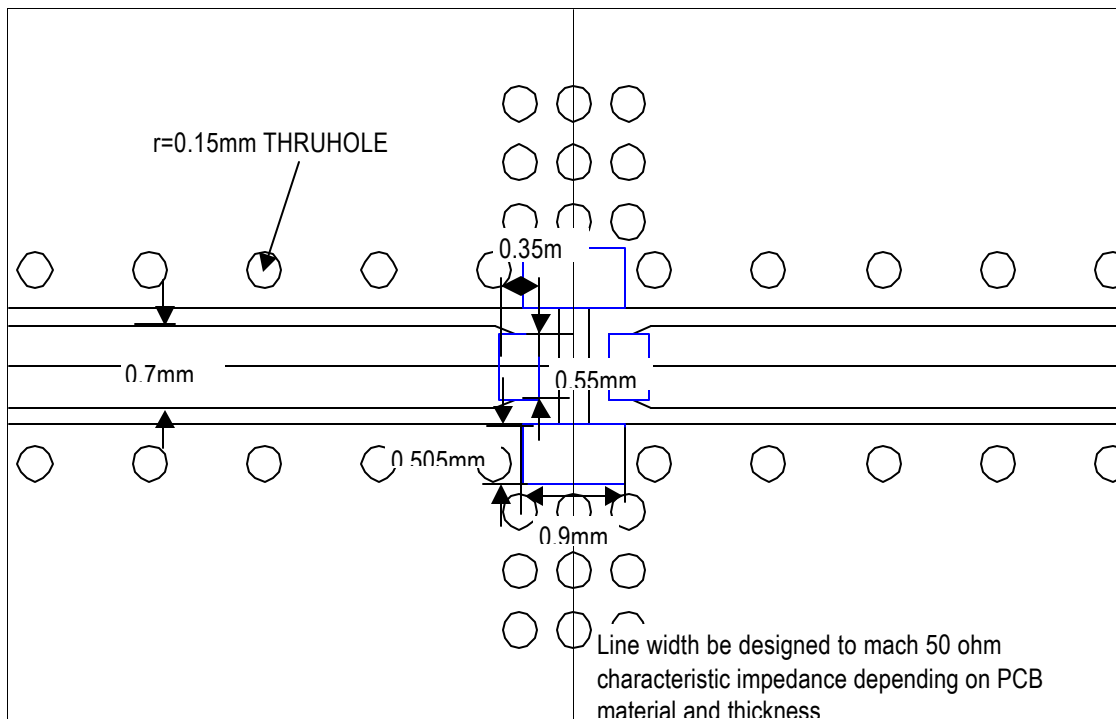
Note: This document is PRELIMINARY. All specifications are subject to change and are not guaranteed.

FREQUENCY CHARACTERISTICS

DEA165487BT-1202



RECOMMENDED LAND PATTERN



Note: This document is PRELIMINARY. All specifications are subject to change and are not guaranteed.

TDK Compact Filter



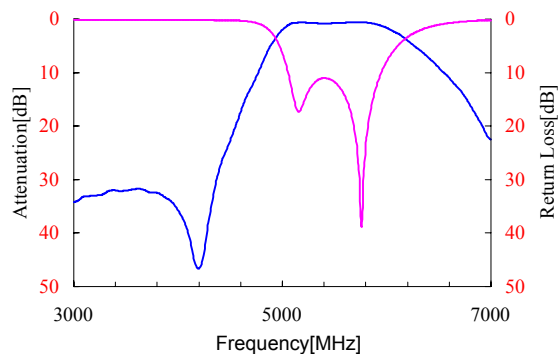
Sample Part No. CF61A4401

Feature

1. Compact and High performance 2pole filter
2. High reliability (Ceramic block filter)
3. SMD type

TENTATIVE

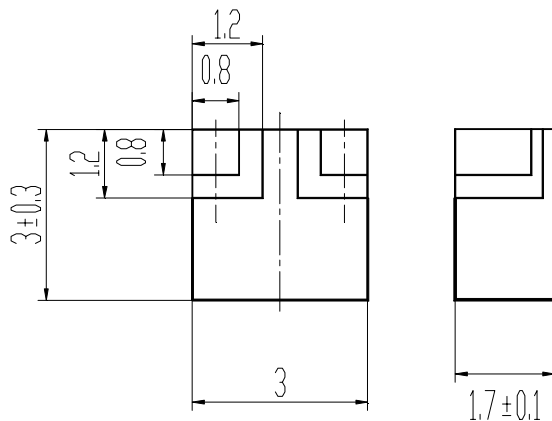
Frequency Characteristics



Electrical Characteristic

Sample Part No.		S0355-4	Typ
Center Frequency	[MHz]	5500	
Band Width	[MHz]	700	
Insertion Loss	[dB]Max.	1.00	0.79
VSWR	[dB]Min.	1.80	1.78
Attenuation	3700MHz [dB] Min.	30	32.2

Dimensions



Tolerance unless otherwise specified ± 0.20

Unit:mm

TDK Compact Filter



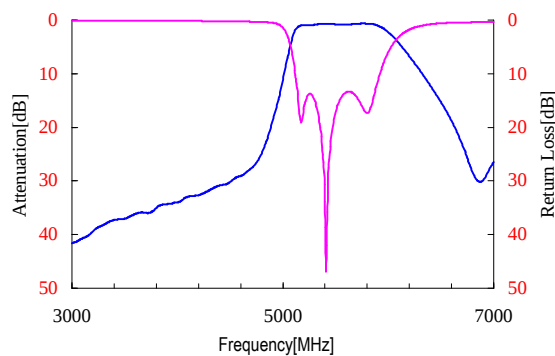
Sample Part No. CF61A4501

Feature

1. Compact and High performance 3pole filter
2. High reliability (Ceramic block filter)
3. SMD type

TENTATIVE

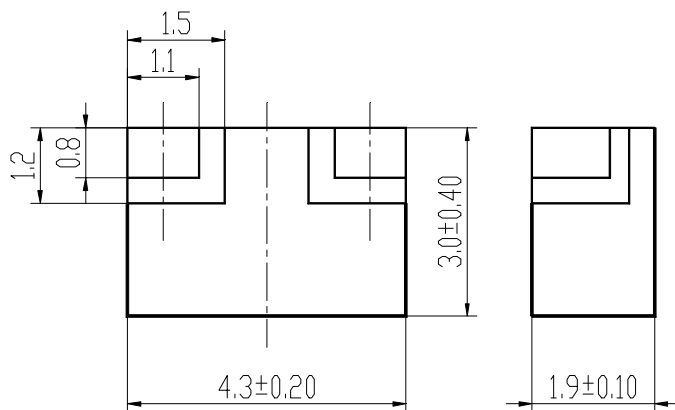
Frequency Characteristics



Electrical Characteristic

Sample Part No.			S0399	Typ
Center Frequency		[MHz]	5500	
Band Width		[MHz]	700	
Insertion Loss		[dB]Max.	2.00	1.19
VSWR		[dB]Min.	1.80	1.50
Attenuation	4600MHz	[dB] Min.	25	29.1

Dimensions



Tolerance unless otherwise specified ±0.20

Unit:mm

TDK Compact Filter



Sample Part No.

CF61A4901

5.5GHz-W/LAN

Feature

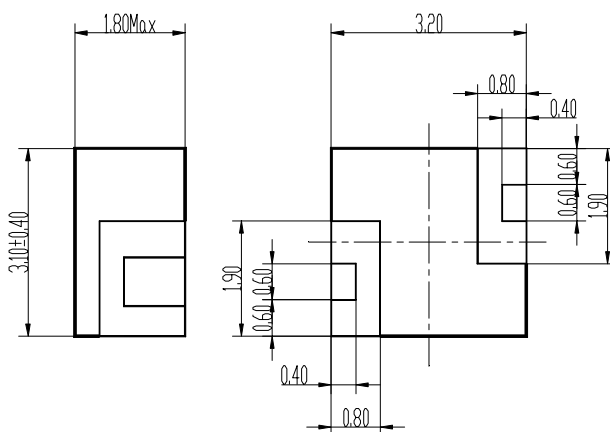
1. Compact and High performance 2pole filter
2. High reliability (Ceramic block filter)
3. SMD type

TENTATIVE

Electrical Characteristic

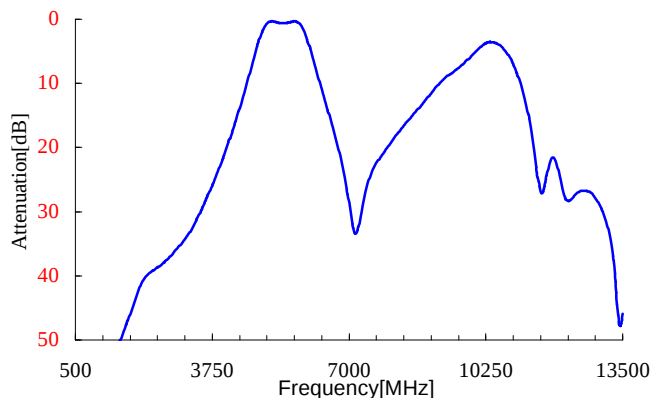
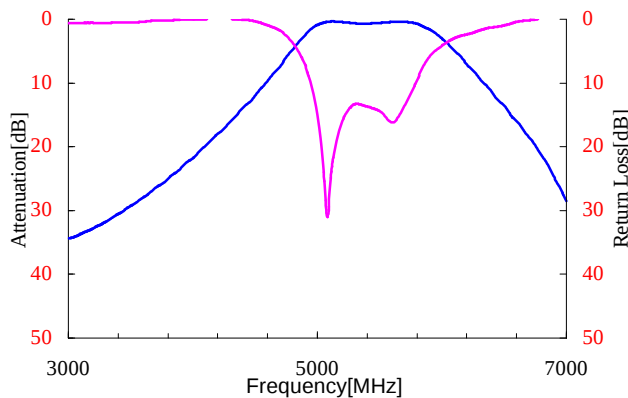
Sample Part No.		CFC61A4901
Center Frequency	[MHz]	5487.5
Band Width	[MHz]	675
Insertion Loss	[dB]Max.	1.20
VSWR	[dB]Min.	2.00
Attenuation	3500MHz [dB] Min.	25

Dimensions

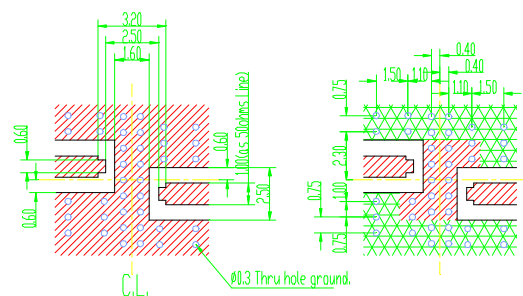


Frequency Characteristics

Tolerance unless otherwise specified ± 0.30
Unit:mm



<< Recommended PCB Layout >>



; Metal patterning for I/O and Ground.

; Patterning for Solder resist coating.

TDK Compact Filter



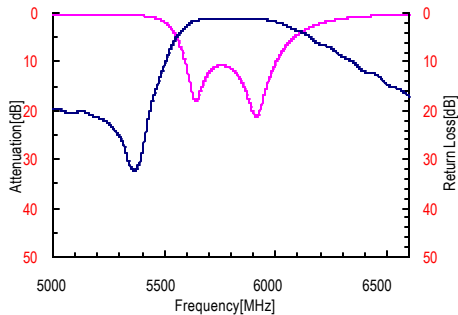
Part No. S0354

Feature

- 1. Compact and High performance 2pole filter
- 2. High reliability (Ceramic block filter)
- 3. SMD type

TENTATIVE

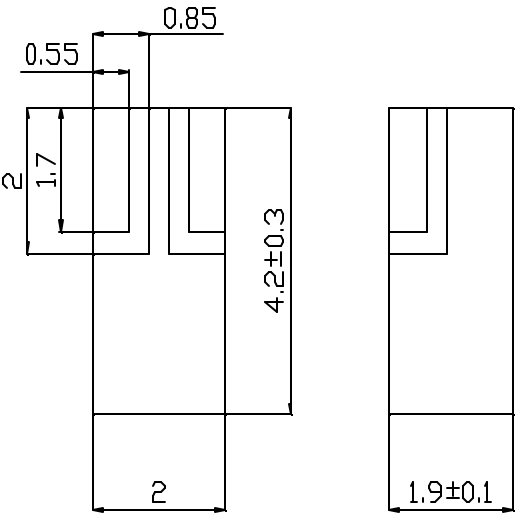
Frequency Characteristics



Electrical Characteristic

Part No.		S0354
Center Frequency	[MHz]	5800
Band Width	[MHz]	150
Insertion Loss	[dB]Max.	2.00
Return Loss	[dB]Min.	9.54
Attenuation	5425MHz	[dB] Min. 15.0
	6175MHz	[dB] Min. 5.0

Dimensions



Tolerance unless otherwise specified +/-0.20

Unit:mm

TDK Compact Filter



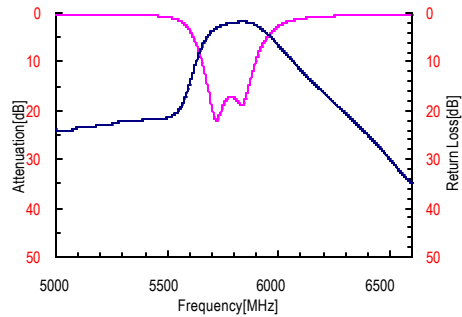
Part No. S0356

Feature

1. Compact and High performance 3pole filter
2. High reliability (Ceramic block filter)
3. SMD type

TENTATIVE

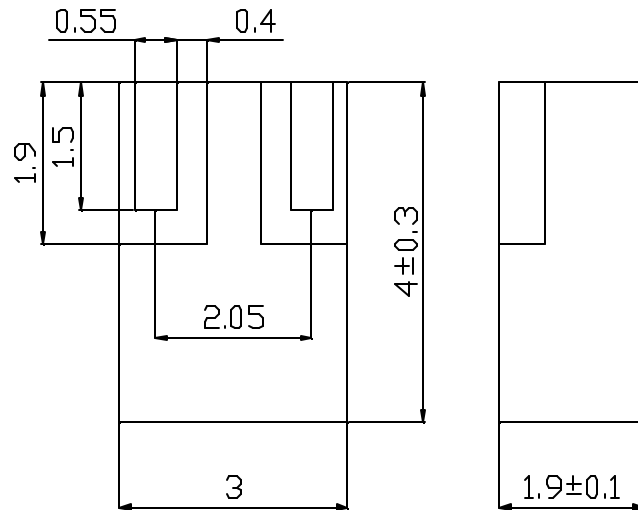
Frequency Characteristics



Electrical Characteristic

Part No.		S0356	
Center Frequency	[MHz]	5800	
Band Width	[MHz]	150	
Insertion Loss	[dB]Max.	3.40	
Return Loss	[dB]Min.	9.54	
Attenuation	5425MHz	[dB] Min.	18.0
	5625MHz	[dB] Min.	10.0
	5975MHz	[dB] Min.	5.0
	6175MHz	[dB] Min.	15.0

Dimensions



Tolerance unless otherwise specified +/-0.20

Unit:mm