TDK Products for Wireless LAN

2004/3/5

for 5GHz (Wide Band)

Balanced Output Multilayer Band Pass Filter

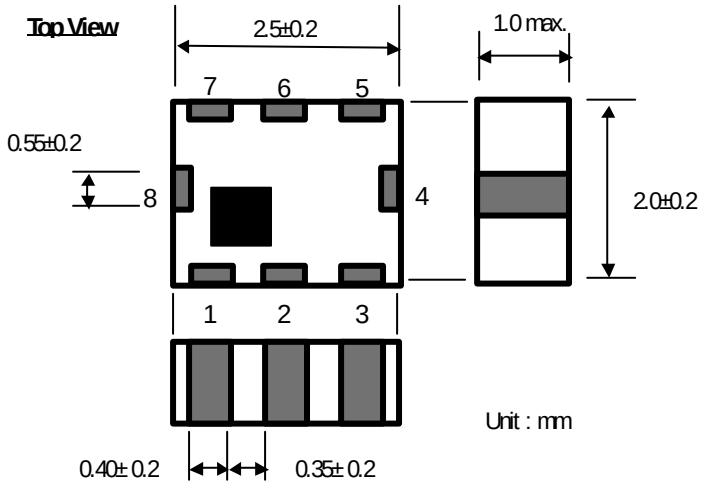
Start Freq.	Stop Freq.	Ins. Loss	Bal.imped.	Atenuation (MIN.)				Size	Part No.
MHz	MHz	dB (MAX)	ohm	MHz	dB	MHz	dB	mm (typ.)	
5150	5350	2.0	100	2700	35	10700	20	2.5x2.0x1.0	DEA255512BT-7007A2
4900	5950	2.5	100	2700	35	10700	20	2.5x2.0x1.0	DEA255425BT-7008A2

Sample Available
New Products
Under Developing

Multilayer Band Pass Filter with Balun

P/N : **DEA255250BT-7007A2** **For 5GHz W-LAN**

MECHANICAL DIMENSIONS



PIN CONFIGURATION

PIN ASSIGNMENT	PIN No.
Unbalanced	4
Balanced	1
Balanced	2
GND or DC feed	6
NC	7
GND	3,5,8

ELECTRICAL CHARACTERISTICS

Unbalanced Impedance	50 ohm
Balanced Impedance	100 ohm
Frequency Range (Pass Band)	5150 – 5350 MHz
Input Return Loss	9 dB min.
Phase Imbalance at Balanced Ports	180 ±10 deg
Amplitude Imbalanced at Balanced Ports	0 ± 1.0 dB max.
Insertion Loss (25 ^{o}C)	2.0 dB max.
Insertion Loss (FULL TEMP)	2.3 dB max.
Attenuation (DC – 2700 MHz)	35 dB min.
Attenuation (10300 –10700 MHz)	20 dB min.

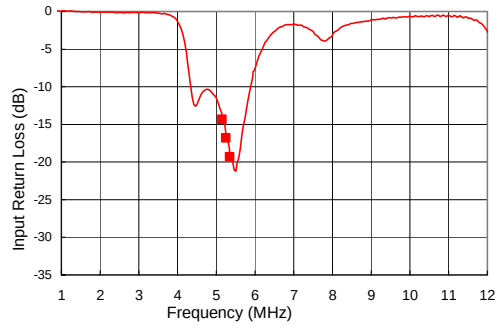
TEMPERATURE RANGE

Storage Temperature: -40 ~ +85^{o}C
Operating Temperature: -40 ~ +85 ^{o}C

FREQUENCY RESPONSE

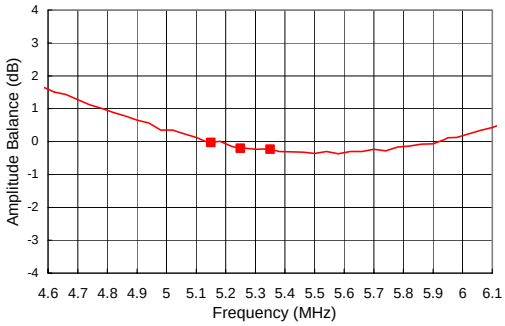
DEA7007A2 (UNBALANCE 50ohm/BALANCE 100ohm) **TDK Corporation**

Input Return Loss



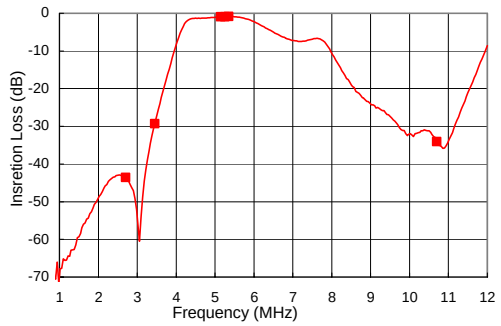
5.150 GHz
-14.34 dB
5.250 GHz
-16.81 dB
5.350 GHz
-19.311 dB

Amplitude Balance



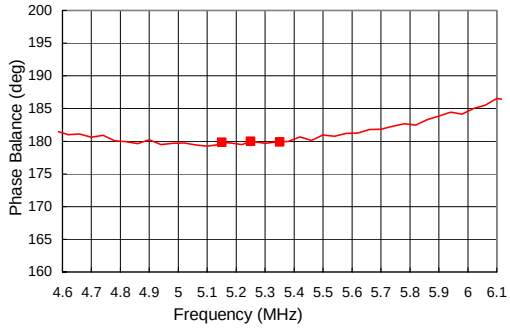
5.150 GHz
-0.03 dB
5.250 GHz
-0.20 dB
5.350 GHz
-0.24 dB

Attenuation



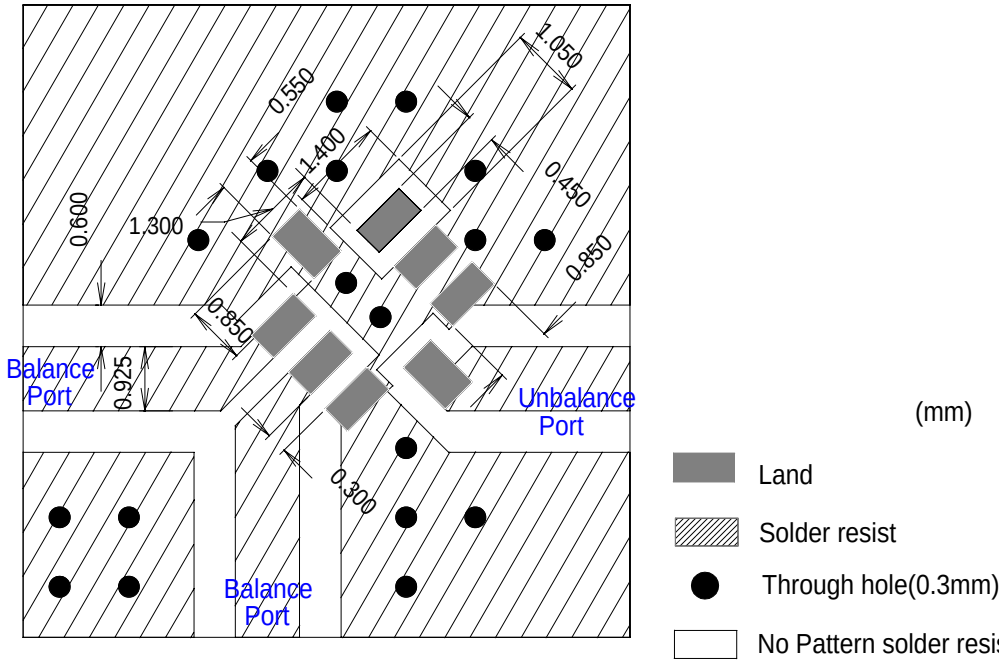
5.150 GHz
-0.95 dB
5.250 GHz
-0.90 dB
5.350 GHz
-0.87 dB
2.700 GHz
-43.54 dB
3.450 GHz
-29.29 dB
10.700 GHz
-34.07 dB

Phase Balance



5.150 GHz
179.8 deg
5.250 GHz
180.0 deg
5.350 GHz
179.9 deg

RECOMMENDED LAND PATTERN



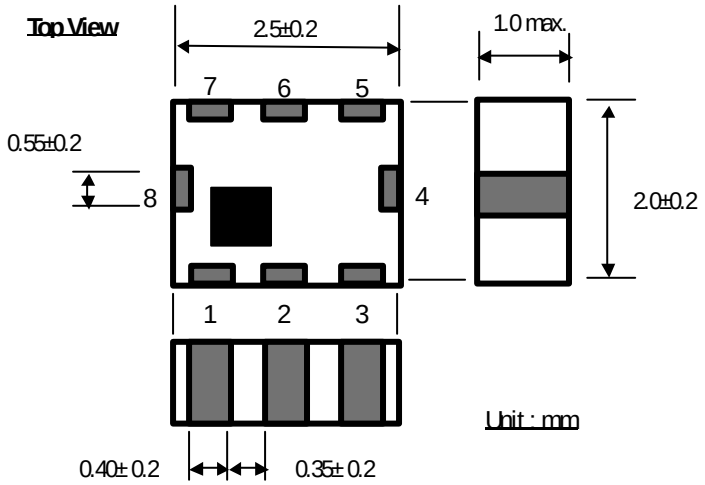
Line width be designed to match 50ohm characteristic impedance, depending on PCB material and thickness.

Note: All specifications are subject to change and are not guaranteed.

Multilayer Band Pass Filter with Balun

P/N : **DEA255425BT-7008A2** **For 5GHz W-LAN**

MECHANICAL DIMENSIONS



PIN CONFIGURATION

PIN ASSIGNMENT	PIN No.
Unbalanced	4
Balanced	1
Balanced	2
GND or DC feed	6
NC	7
GND	3,5,8

ELECTRICAL CHARACTERISTICS

Unbalanced Impedance	50 ohm
Balanced Impedance	100 ohm
Frequency Range (Pass Band)	4900 – 5950 MHz
Input Return Loss	7 dB min.
Phase Imbalance at Balanced Ports	180 ±15 deg
Amplitude Imbalanced at Balanced Ports	0 ± 2.0 dB max.
Insertion Loss (25 ^{o}C)	2.5 dB max.
Insertion Loss (FULL TEMP)	2.8 dB max.
Attenuation (DC – 2700 MHz)	35 dB min.
Attenuation (10300 –10700 MHz)	20 dB min.

TEMPERATURE RANGE

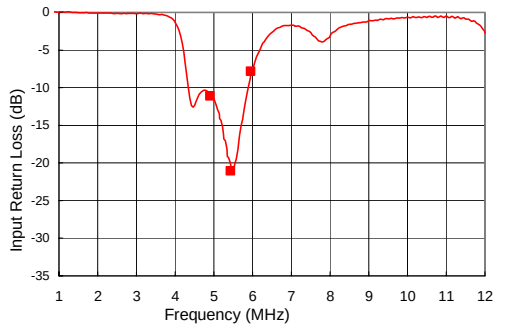
Storage Temperature: -40 ~ +85^{o}C
Operating Temperature: -40 ~ +85 ^{o}C

Note: All specifications are subject to change and are not guaranteed.

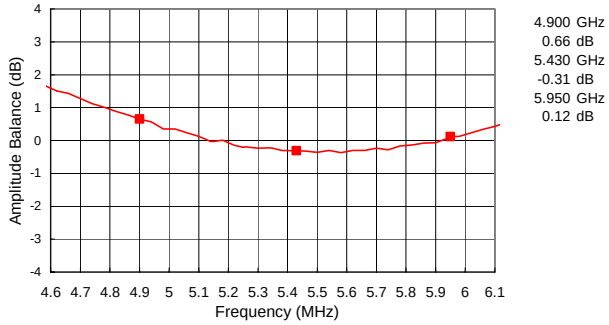
FREQUENCY RESPONSE

DEA7008A2 (UNBALANCE 50ohm/BALANCE 100ohm) **TDK Corporation**

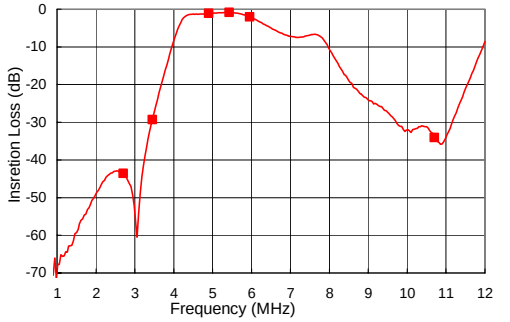
Input Return Loss



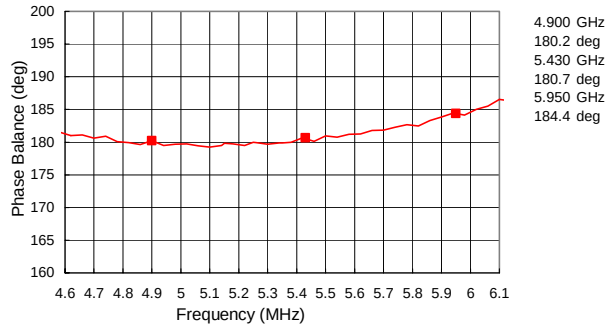
Amplitude Balance



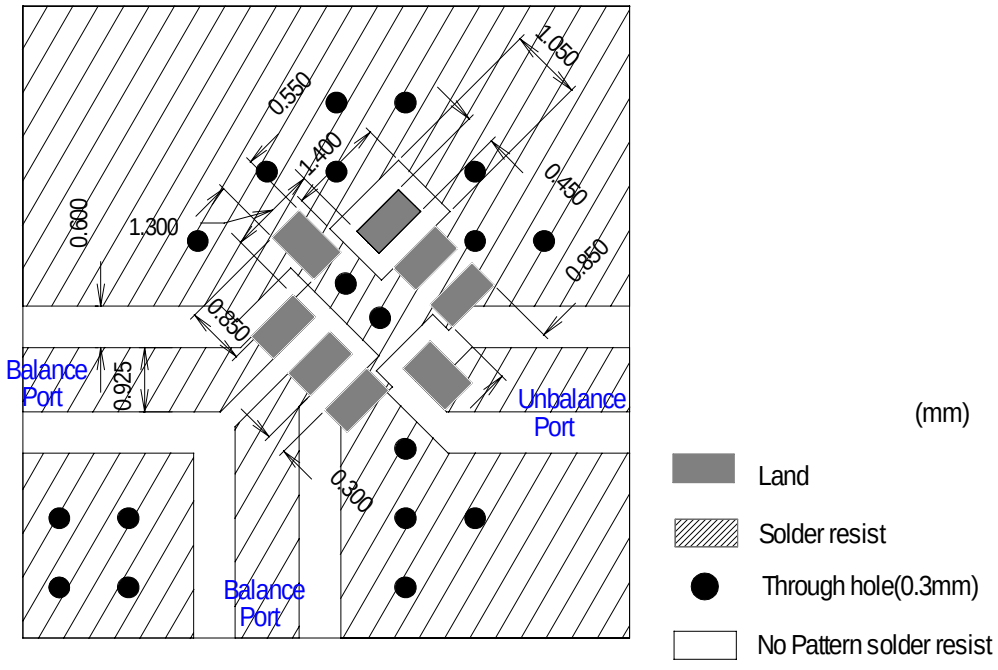
Attenuation



Phase Balance



RECOMMENDED LAND PATTERN



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

Note: All specifications are subject to change and are not guaranteed.