

Thin-Film RF/Microwave Filters

1206 High Performance Low Pass 8W

General Information – SMD Termination



ITF TECHNOLOGY

The ITF LGA Filter is based on thin-film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly.

The ITF Filter is offered in a variety of frequency bands compatible with various types of high frequency wireless systems.

FEATURES

- Small size: 1206
- Frequency: 700 – 3800 MHz
- Characteristic impedance: 50Ω
- Operating/Storage temp: -40°C to +85°C
- Low profile
- Rugged construction
- Taped and reeled
- RoHS compliant

APPLICATIONS

- Base Station
- 5G & 6G / UWB
- Mobile communications
- Satellite TV receivers
- GPS
- Vehicle location systems
- Wireless LAN's

FINAL QUALITY INSPECTION

Finished parts are 100% tested for electrical parameters and visual/ mechanical characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance : 125°C, IR, 4 hours

TERMINATION

Nickel/ Lead free Solder coating (Sn100) compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

HOW TO ORDER

LP	1206	A	0700	A	S	TR
Series	Size	Type	Frequency (MHz)	Sub-Type	Termination	Taped & Reeled

ELECTRICAL SPECIFICATION

Part Number	Fc [MHz]	I.L [dB] @Fc	VSWR @ Fc	Rejection [dB]	Rejection [dB]	Rejection [dB]	Rejection [dB]
LP1206A0700ASTR	700	-0.8	1:1.22	-20dB at 980MHz	-45dB at 1400MHz	-45dB at 2100MHz	-30dB at 2800MHz
LP1206A0860ASTR	860	-0.85	1:1.285	-25dB at 1204MHz	-45dB at 1720MHz	-45dB at 2580MHz	-30dB at 3440MHz
LP1206A1000ASTR	1000	-0.7	1:1.43	-30dB at 1500 - 2000MHz	-25dB at 2000 - 3000MHz	-25dB at 3000 - 4000MHz	-----
LP1206A1100ASTR	1100	-0.8	1:1.43	-30dB at 2000 - 4000MHz	-----	-----	-----
LP1206A1500ASTR	1500	-0.7	1:1.43	-30dB at 2000 - 3000MHz	-25dB at 3000 - 4000MHz	-20dB at 4500 - 6000 MHz	-----
LP1206A1600ASTR	1600	-0.8	1:1.43	-30dB at 2200 - 4000MHz	-20dB at 4000 - 6000MHz	-----	-----
LP1206A2000ASTR	2000	-0.8	1:1.43	-27dB at 3000 - 4000MHz	-25dB at 4000 - 6000MHz	-20dB at 6000 - 8000MHz	-----
LP1206A2500ASTR	2500	-0.8	1:1.43	-27dB at 4000 - 5000MHz	-25dB at 5000 - 7500MHz	-25dB at 7500 - 8500MHz	-----
LP1206A2600ASTR	2600	-0.7	1:1.43	-25dB at 4000 - 6000MHz	-18dB at 6000 - 8000MHz	-----	-----
LP1206A3200ASTR	3200	-0.85	1:1.22	-30dB at 4.48GHz	-40dB at 6.4GHz	-25dB at 9.6GHz	-25dB at 10GHz
LP1206A3500ASTR	3500	-0.7	1:1.285	-30dB at 4.9GHz	-40dB at 7GHz	-25dB at 10.5GHz	-15dB at 11GHz
LP1206A3600ASTR	3600	-0.7	1:1.12	-30dB at 5.04GHz	-35dB at 7.2GHz	-25dB at 10.8GHz	-----
LP1206A3800ASTR	3800	0.8	1:1.22	-35dB at 5.32GHz	-28dB at 7.6GHz	-33dB at 10GHz	-----

Click on part number to see full specifications

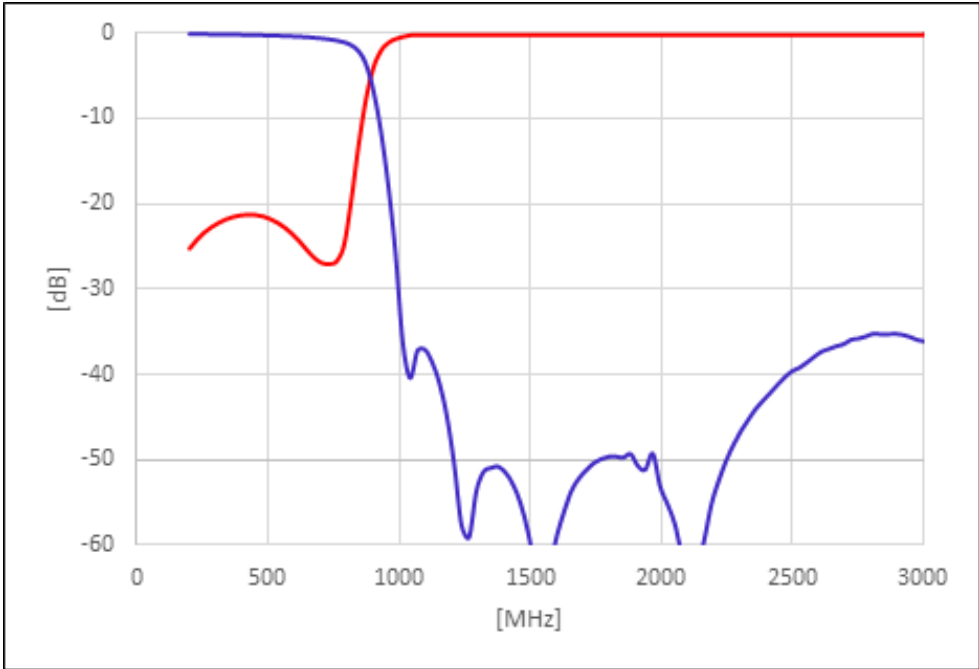
Thin-Film RF/Microwave Filters
1206 High Performance Low Pass 8W
LP1206A0700ASTR – SMD Termination



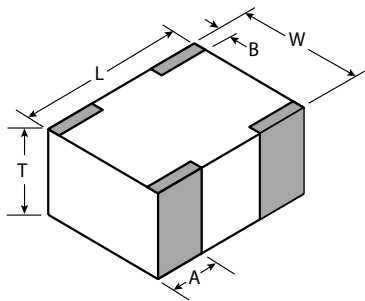
TYPICAL ELECTRICAL PERFORMANCE

P/N	I.Loss @ 700MHz	R.Loss @ 700MHz	Attenuation
LP1206A0700ASTR	0.8dB max.	-20dB	-20dB at 980MHz -45dB at 1400MHz -45dB at 2100MHz -30dB at 2800MHz

Click here to return to main table.

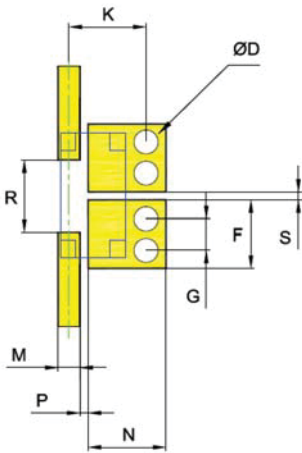


DIMENSIONS (TOP VIEW)



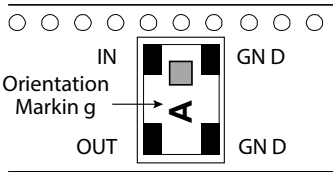
mm (inches)	
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
B	0.35±0.15 (0.014±0.006)

RECOMMENDED PAD LAYOUT



mm (inches)	
F	1.70±0.05 (0.067±0.002)
G	0.78±0.05 (0.031±0.002)
K	1.91±0.10 (0.075±0.004)
M	0.54±0.025 (0.021±0.001)
N	1.93±0.05 (0.076±0.002)
P	0.21±0.04 (0.008±0.002)
R	1.80±0.04 (0.071±0.002)
S	0.20±0.04 (0.008±0.002)
D	0.60±0.10 (0.024±0.004)

TERMINAL AND LAYOUT (TOP VIEW)



*The recommended distance to the PCB Ground Plane is 0.254mm (0.010")
** PCB: Taconic Orcon RF-35P

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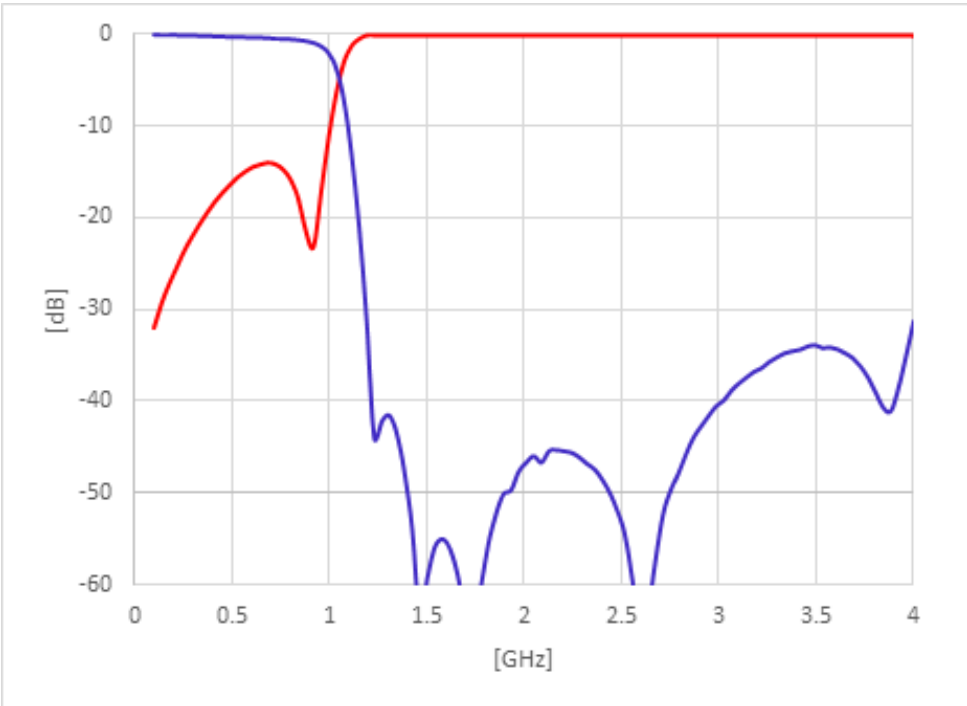
LP1206A0860ASTR – SMD Termination



TYPICAL ELECTRICAL PERFORMANCE

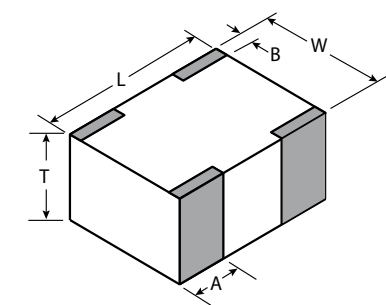
P/N	I.Loss @ 860MHz	R.Loss @ 860MHz	Attenuation
LP1206A0860ASTR	0.85dB max.	-18dB	-25dB at 1204MHz -45dB at 1720MHz -45dB at 2580MHz -30dB at 3440MHz

Click here to return to main table.

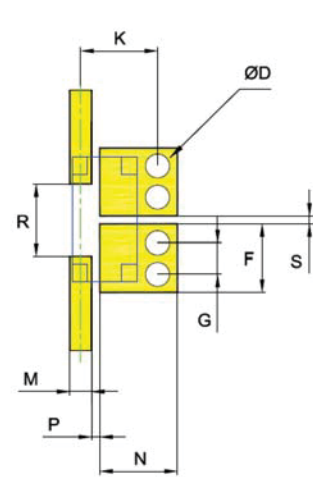


DIMENSIONS (TOP VIEW)

RECOMMENDED PAD LAYOUT

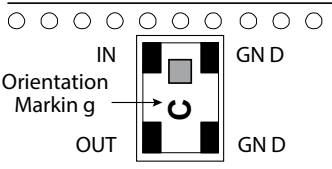


mm (inches)	
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
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TERMINAL AND LAYOUT (TOP VIEW)



*The recommended distance to the PCB Ground Plane is 0.254mm (0.010")
 ** PCB: Taconic Orcer RF-35P

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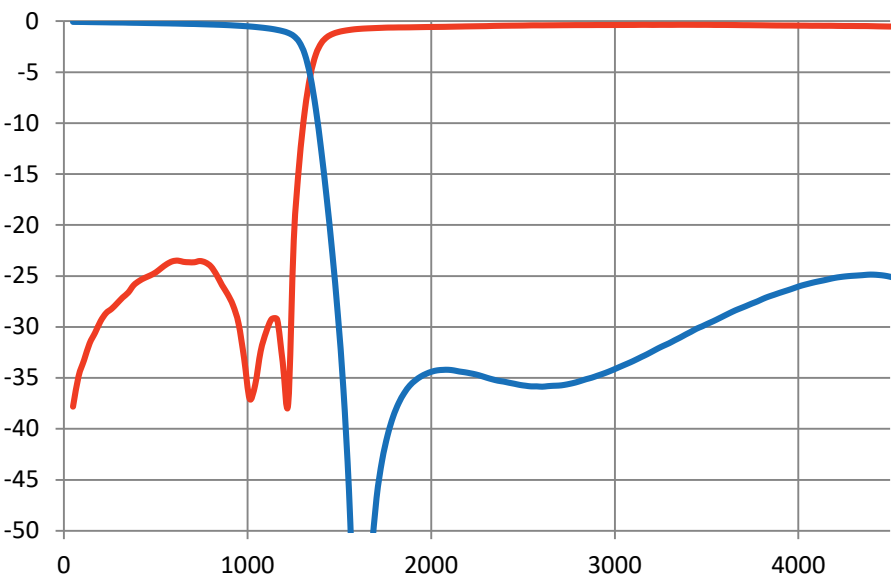
LP1206A1000ASTR – SMD Termination



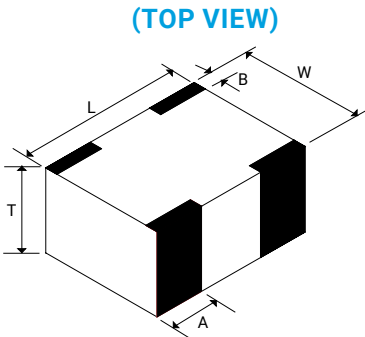
TYPICAL ELECTRICAL PERFORMANCE

P/N	I.Loss @ 1000MHz	R.Loss @ 1000MHz	ATTENUATION [min.]
LP1206A1000ASTR	0.7dB max.	-15dB	-30dB at 1500-2000MHz -25dB at 2000-3000MHz -25dB at 3000-4000MHz

Click here to return to main table.

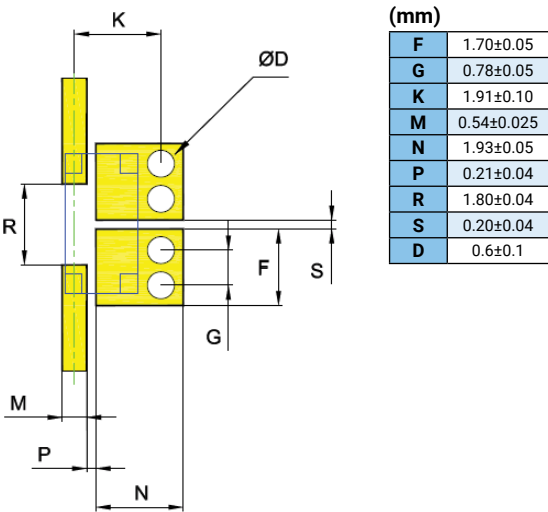


DIMENSIONS

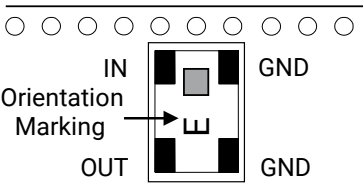


mm (inches)	
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
B	0.35±0.15 (0.014±0.006)

RECOMMENDED PAD LAYOUT



TERMINALS (TOP VIEW)



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 ** PCB: Taconic Orcer RF-35P

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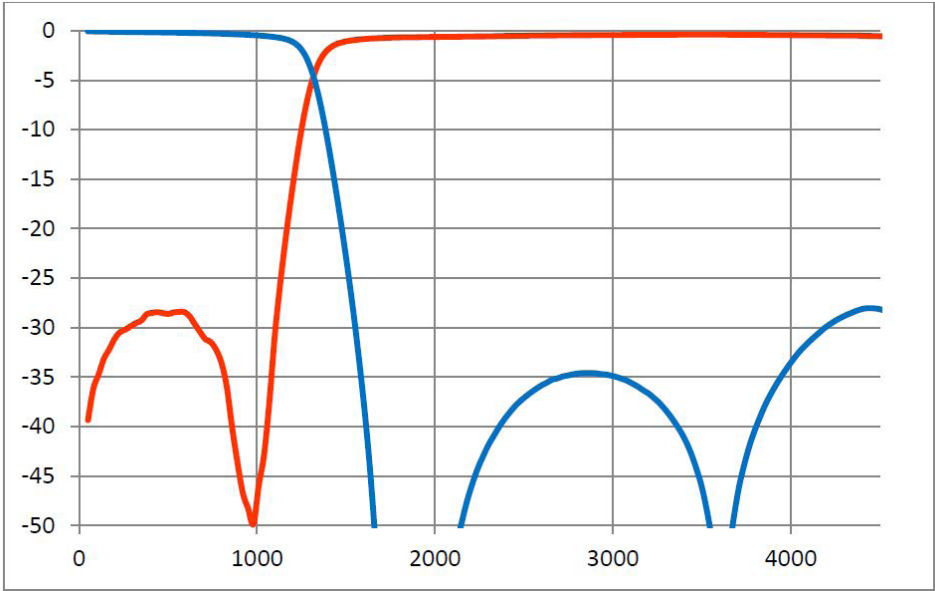
LP1206A1100ASTR – SMD Termination



TYPICAL ELECTRICAL PERFORMANCE

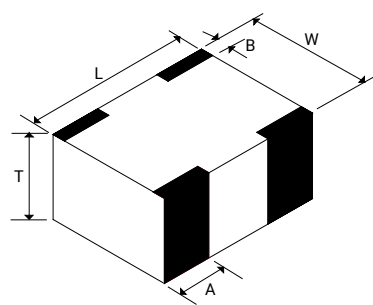
P/N	I.Loss @ 1100MHz	R.Loss @ 1100MHz	ATTENUATION [min.]
LP1206A1100ASTR	0.8dB max.	-15dB	-30dB at 2000-4000MHz

Click here to return to main table.



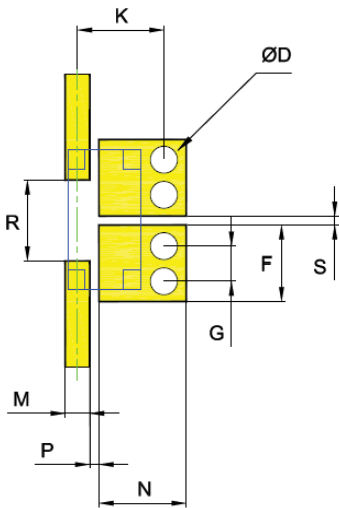
DIMENSIONS

(TOP VIEW)



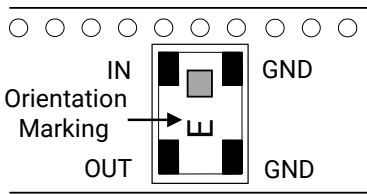
mm (inches)	
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
B	0.35±0.15 (0.014±0.006)

RECOMMENDED PAD LAYOUT



(mm)	
F	1.70±0.05
G	0.78±0.05
K	1.91±0.10
M	0.54±0.025
N	1.93±0.05
P	0.21±0.04
R	1.80±0.04
S	0.20±0.04
D	0.6±0.1

TERMINALS (TOP VIEW)



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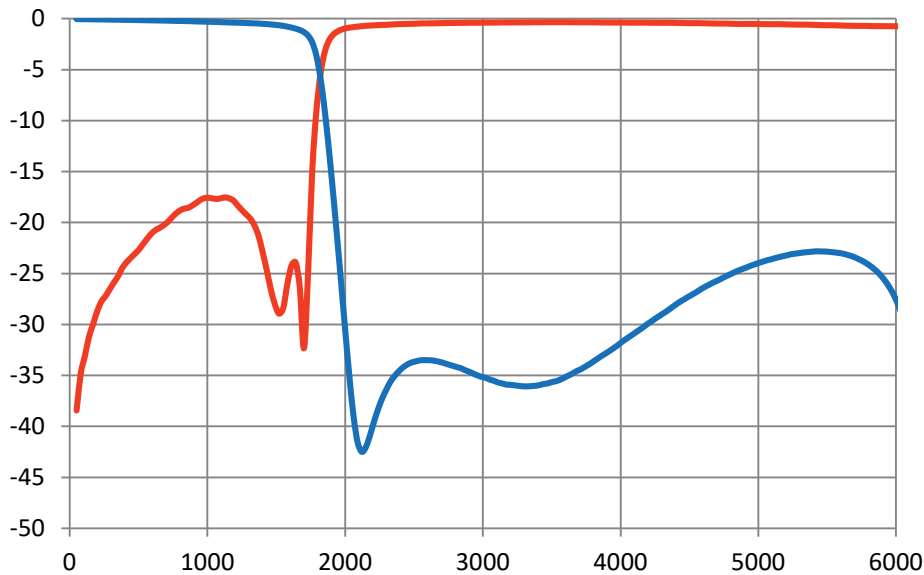
LP1206A1500ASTR – SMD Termination



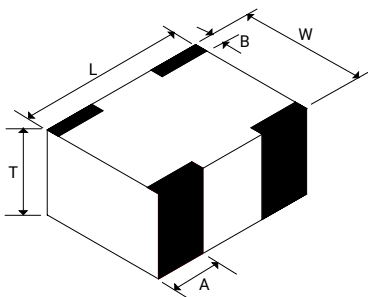
TYPICAL ELECTRICAL PERFORMANCE

P/N	I.Loss @ 1500MHz	R.Loss @ 1500MHz	ATTENUATION [min.]
LP1206A1500ASTR	0.8dB max.	-15dB	-30dB at 2000-3000MHz -25dB at 3000-4000MHz -20dB at 4500-6000MHz

Click here to return to main table.

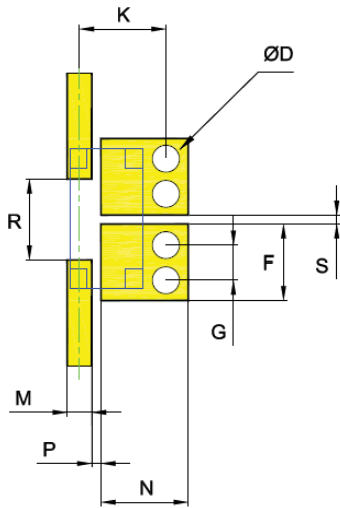


DIMENSIONS (TOP VIEW)



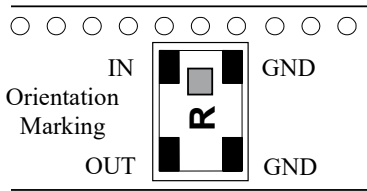
mm (inches)	
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
B	0.35±0.15 (0.014±0.006)

RECOMMENDED PAD LAYOUT



(mm)	
F	1.70±0.05
G	0.78±0.05
K	1.91±0.10
M	0.54±0.025
N	1.93±0.05
P	0.21±0.04
R	1.80±0.04
S	0.20±0.04
D	0.6±0.1

TERMINALS (TOP VIEW)



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 ** PCB: Taconic Orcler RF-35P

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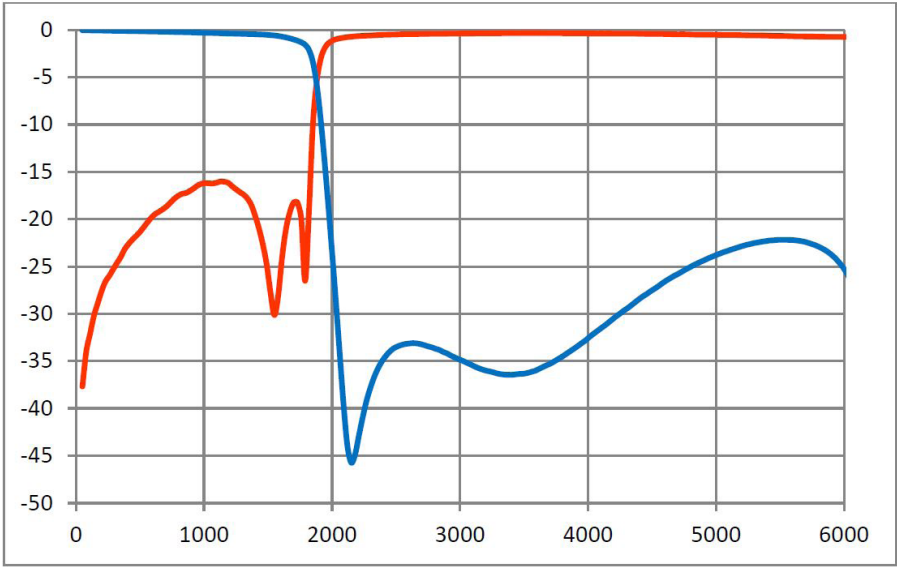
LP1206A1600ASTR – SMD Termination



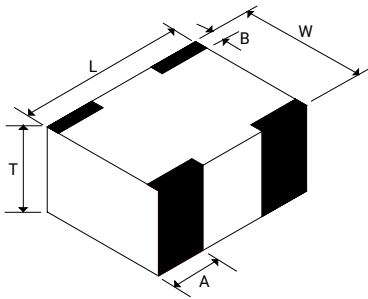
TYPICAL ELECTRICAL PERFORMANCE

P/N	I.Loss @ 1600MHz	R.Loss @ 1600MHz	ATTENUATION [min.]
LP1206A1600ASTR	0.8dB max.	-15dB	-30dB at 2200-4000MHz -20dB at 4001-6000MHz

Click here to return to main table.

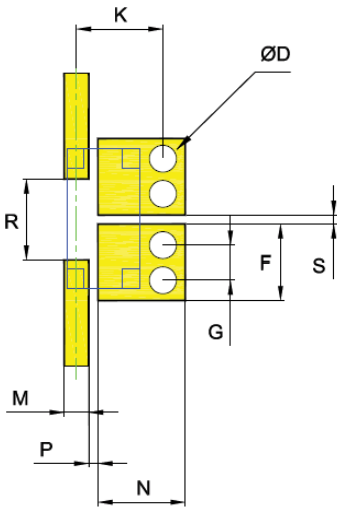


DIMENSIONS (TOP VIEW)



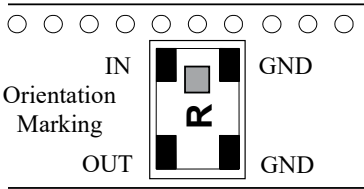
mm (inches)	
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
B	0.35±0.15 (0.014±0.006)

RECOMMENDED PAD LAYOUT



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F	1.70±0.05
G	0.78±0.05
K	1.91±0.10
M	0.54±0.025
N	1.93±0.05
P	0.21±0.04
R	1.80±0.04
S	0.20±0.04
D	0.6±0.1

TERMINALS (TOP VIEW)



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 ** PCB: Taconic Orcon RF-35P

Thin-Film RF/Microwave Filters

1206 High Performance Low Pass 8W

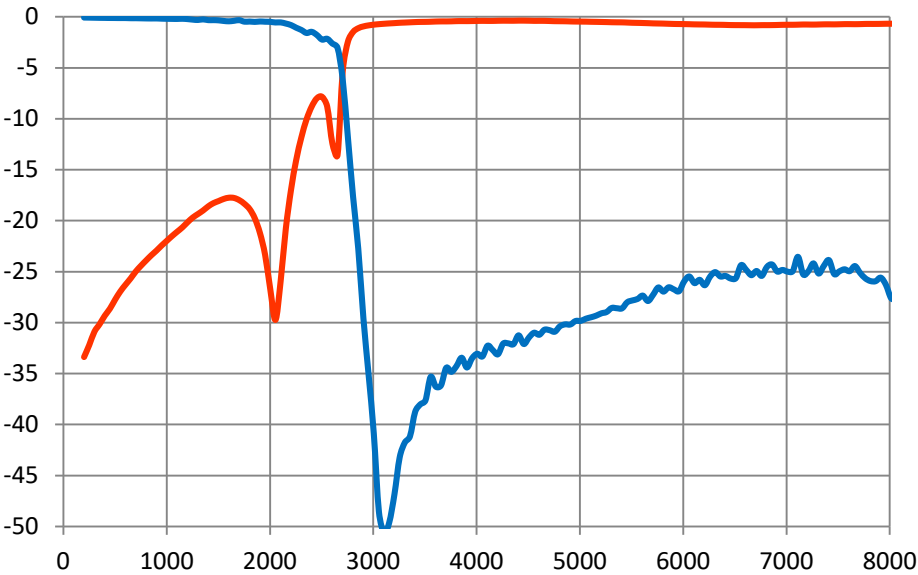
LP1206A2000ASTR – SMD Termination



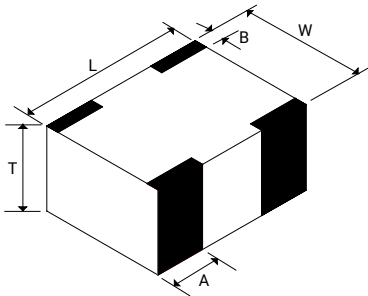
TYPICAL ELECTRICAL PERFORMANCE

P/N	I.Loss @ 2000MHz	R.Loss @ 2000MHz	ATTENUATION [min.]
LP1206A2000ASTR	0.7dB max.	-15dB	-27dB at 3000-4000MHz -25dB at 4000-6000MHz -20dB at 6000-8000MHz

Click here to return to main table.

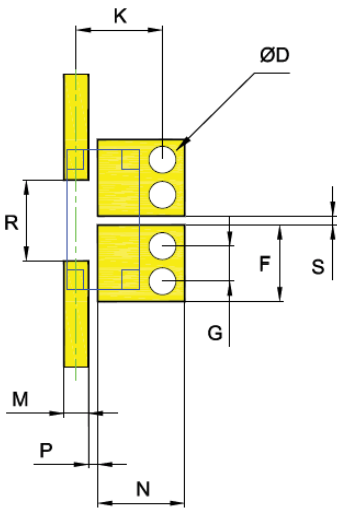


DIMENSIONS (TOP VIEW)



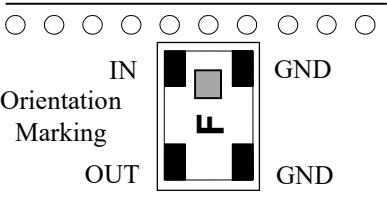
mm (inches)	
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W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
B	0.35±0.15 (0.014±0.006)

RECOMMENDED PAD LAYOUT



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K	1.91±0.10
M	0.54±0.025
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TERMINALS (TOP VIEW)



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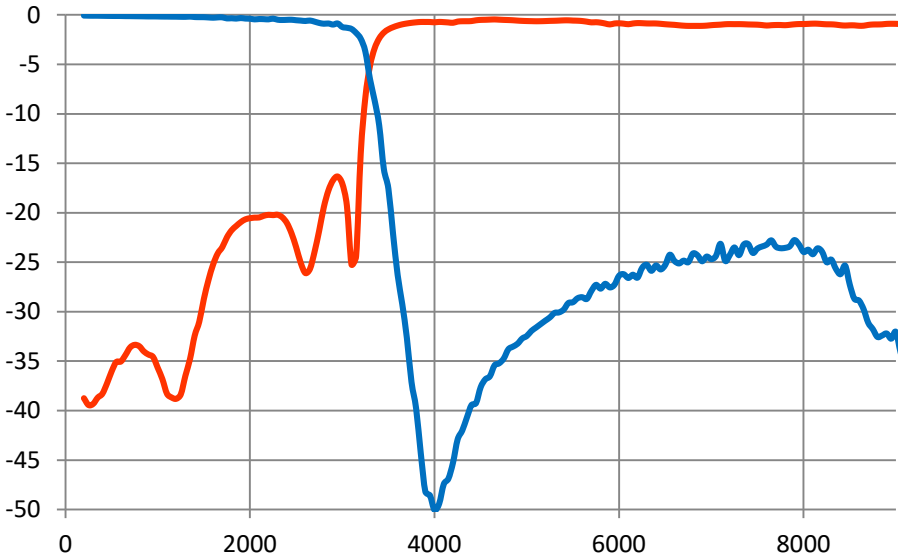
LP1206A2500ASTR – SMD Termination



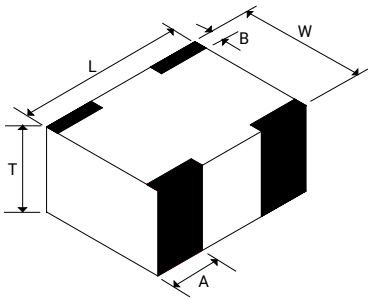
TYPICAL ELECTRICAL PERFORMANCE

P/N	I.Loss @ 2500MHz	R.Loss @ 2500MHz	ATTENUATION [min.]
LP1206A2500ASTR	0.7dB max.	-15dB	-25dB at 4000-5000MHz -22dB at 5000-7500MHz -15dB at 7500-8500MHz

Click here to return to main table.

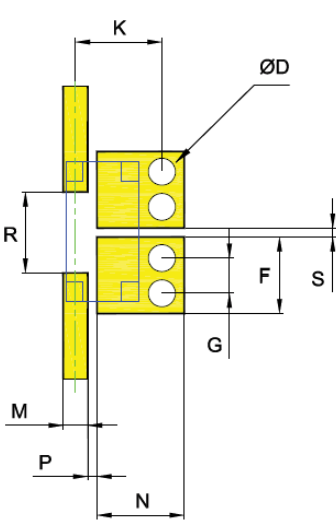


DIMENSIONS (TOP VIEW)



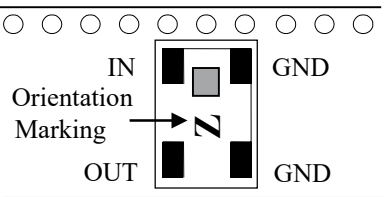
mm (inches)	
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W	1.60±0.1 (0.063±0.004)
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RECOMMENDED PAD LAYOUT



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P	0.21±0.04
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TERMINALS AND LAYOUT (TOP VIEW)



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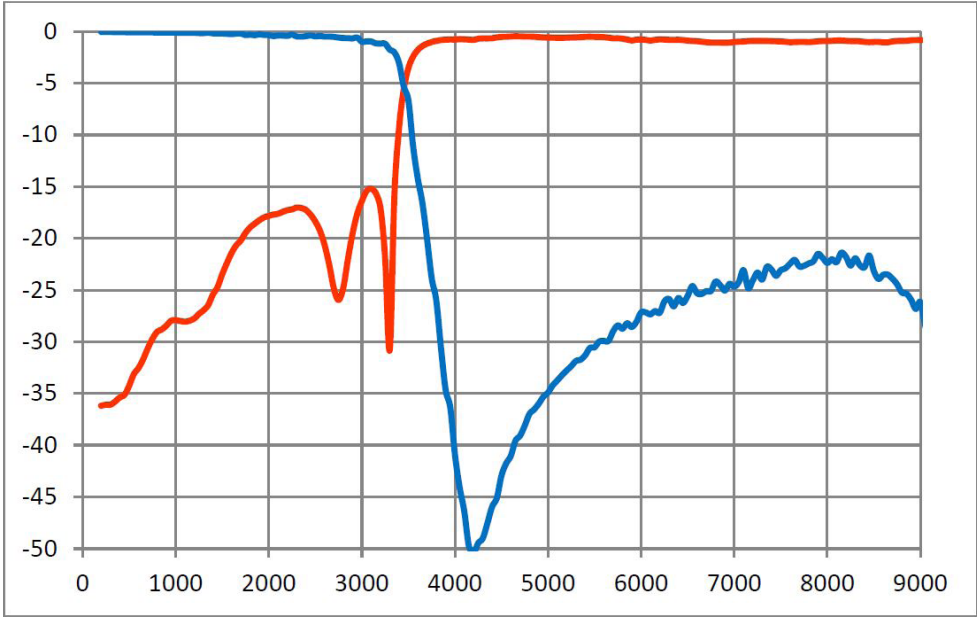
LP1206A2600ASTR – SMD Termination



TYPICAL ELECTRICAL PERFORMANCE

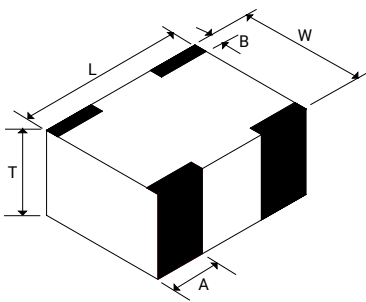
P/N	I.Loss @ 2600MHz	R.Loss @ 2600MHz	ATTENUATION [min.]
LP1206A2600ASTR	0.7dB max.	-15dB	-25dB at 4000-6000MHz -18dB at 6001-8000MHz

Click here to return to main table.



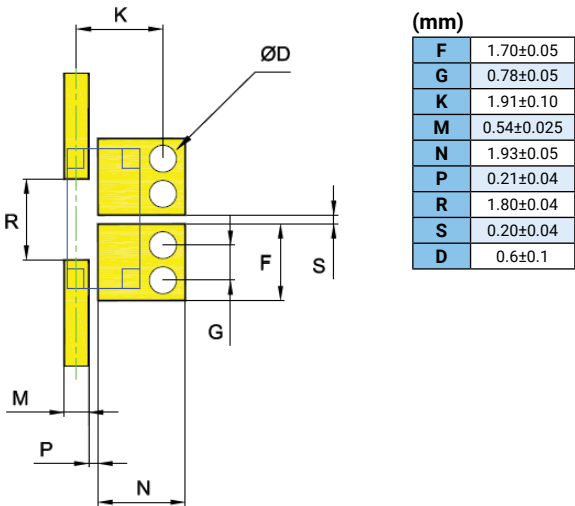
DIMENSIONS

(TOP VIEW)

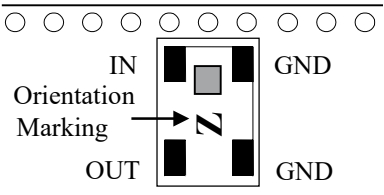


mm (inches)	
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
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RECOMMENDED PAD LAYOUT



TERMINALS AND LAYOUT (TOP VIEW)



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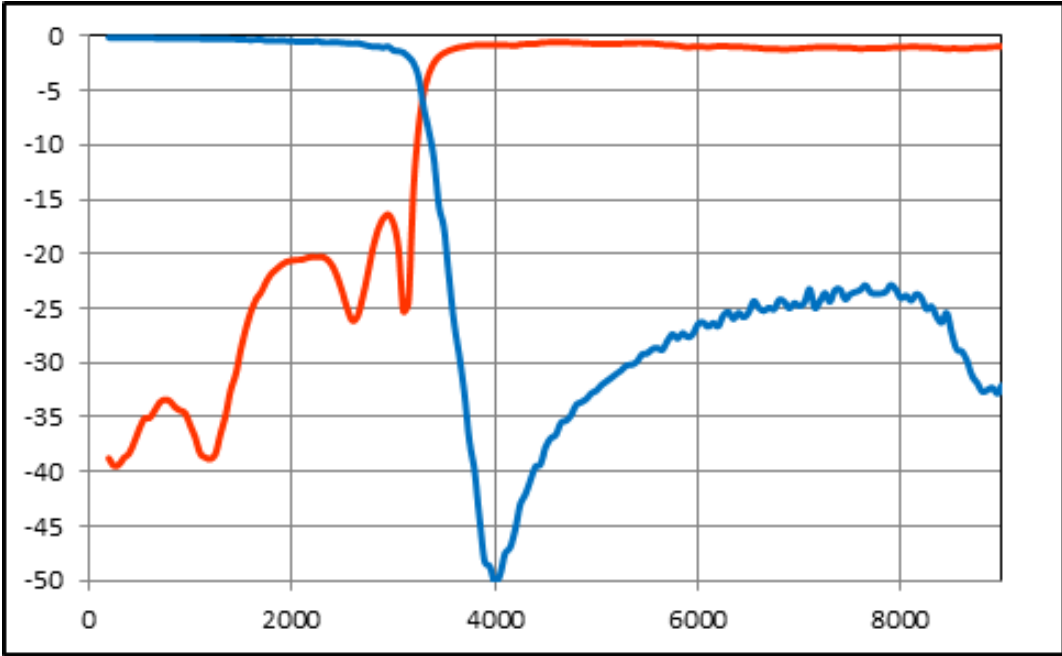
LP1206A3200ASTR – SMD Termination



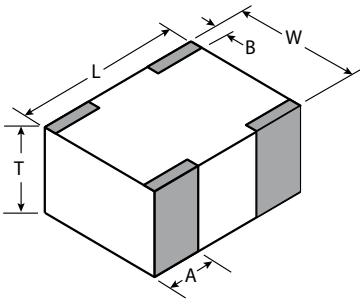
TYPICAL ELECTRICAL PERFORMANCE

P/N	I.Loss @ 3.2GHz	R.Loss @ 3.2GHz	Attenuation
LP1206A3200ASTR	0.85dB max.	-20dB	-30dB at 4.48GHz -40dB at 6.4GHz -25dB at 9.6GHz -25dB at 10GHz

Click here to return to main table.

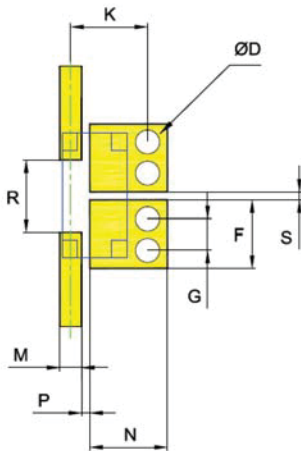


DIMENSIONS (TOP VIEW)



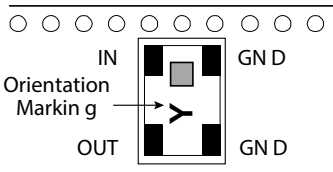
mm (inches)	
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
B	0.35±0.15 (0.014±0.006)

RECOMMENDED PAD LAYOUT



mm (inches)	
F	1.70±0.05 (0.067±0.002)
G	0.78±0.05 (0.031±0.002)
K	1.91±0.10 (0.075±0.004)
M	0.54±0.025 (0.021±0.001)
N	1.93±0.05 (0.076±0.002)
P	0.21±0.04 (0.008±0.002)
R	1.80±0.04 (0.071±0.002)
S	0.20±0.04 (0.008±0.002)
D	0.60±0.10 (0.024±0.004)

TERMINAL AND LAYOUT (TOP VIEW)



*The recommended distance to the PCB Ground Plane is 0.254mm (0.010")
 ** PCB: Taconic Orcer RF-35P

Thin-Film RF/Microwave Filters

1206 High Performance Low Pass 8W

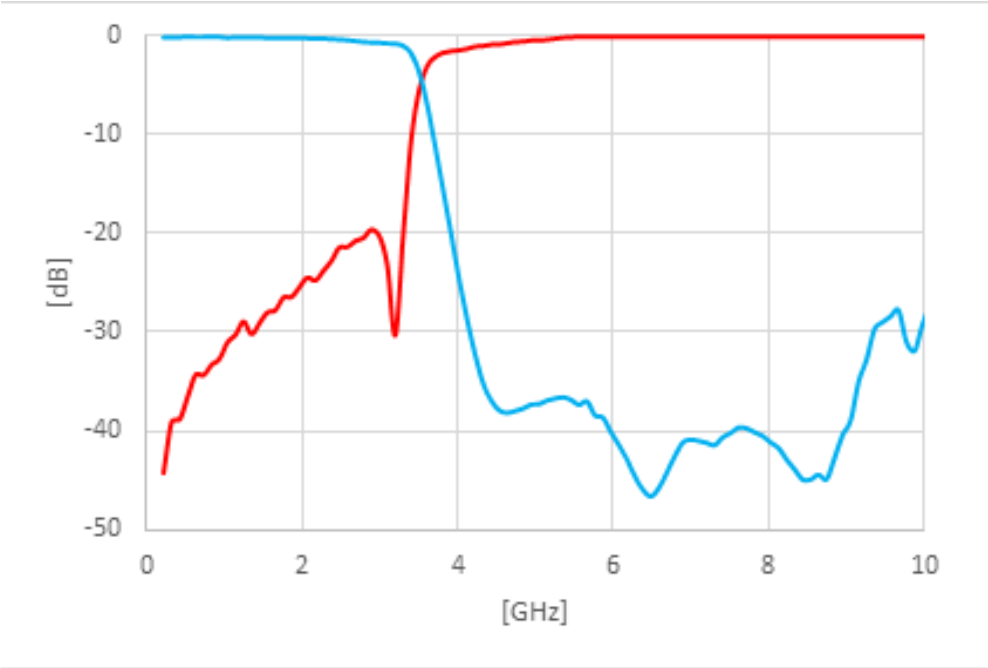
LP1206A3500ASTR – SMD Termination



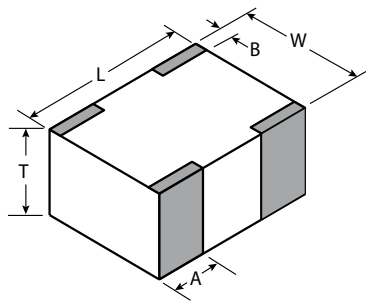
TYPICAL ELECTRICAL PERFORMANCE

P/N	I.Loss @ 3.5GHz	R.Loss @ 3.5GHz	Attenuation
LP1206A3500ASTR	0.7dB max.	-18dB	-30dB at 4.9GHz -40dB at 7GHz -25dB at 10.5GHz -15dB at 11GHz

Click here to return to main table.

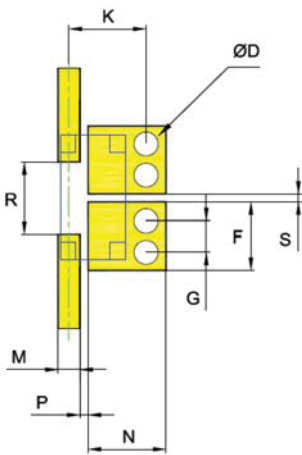


DIMENSIONS (TOP VIEW)



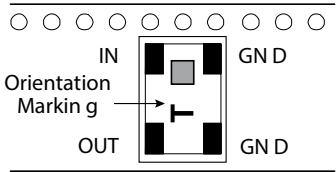
mm (inches)	
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
B	0.35±0.15 (0.014±0.006)

RECOMMENDED PAD LAYOUT



mm (inches)	
F	1.70±0.05 (0.067±0.002)
G	0.78±0.05 (0.031±0.002)
K	1.91±0.10 (0.075±0.004)
M	0.54±0.025 (0.021±0.001)
N	1.93±0.05 (0.076±0.002)
P	0.21±0.04 (0.008±0.002)
R	1.80±0.04 (0.071±0.002)
S	0.20±0.04 (0.008±0.002)
D	0.60±0.10 (0.024±0.004)

TERMINAL AND LAYOUT (TOP VIEW)



*The recommended distance to the PCB Ground Plane is 0.254mm (0.010")
 ** PCB: Taconic Orger RF-35P

Thin-Film RF/Microwave Filters

1206 High Performance Low Pass 8W

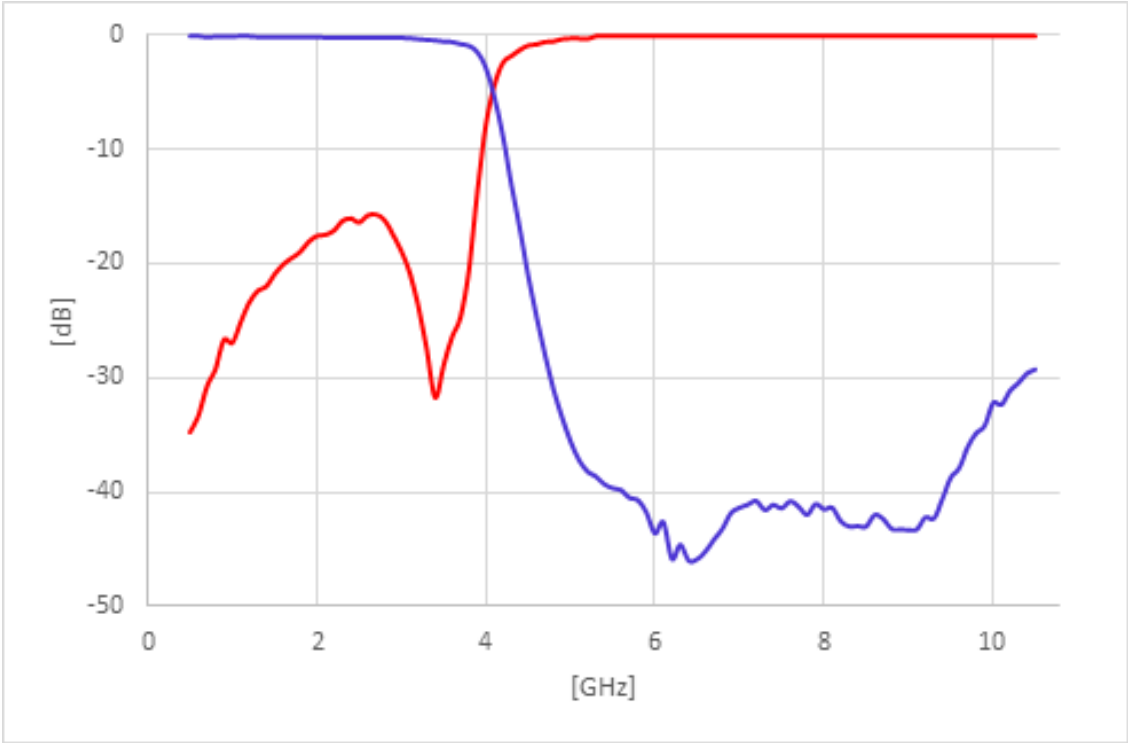
LP1206A3600ASTR – SMD Termination



TYPICAL ELECTRICAL PERFORMANCE

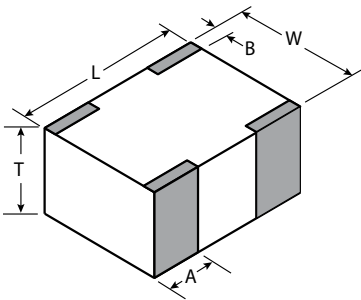
P/N	I.Loss @ 3.6GHz	R.Loss @ 3.6GHz	Attenuation
LP1206A3600ASTR	0.7dB max.	-25dB	-30dB at 5.04GHz -35dB at 7.2GHz -25dB at 10.8GHz

Click here to return to main table.



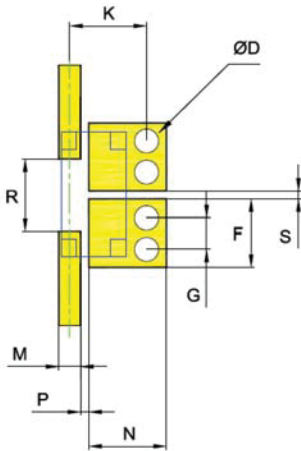
DIMENSIONS

(TOP VIEW)



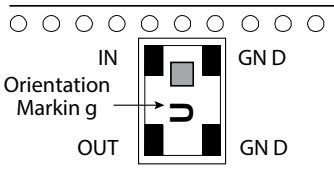
mm (inches)	
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
B	0.35±0.15 (0.014±0.006)

RECOMMENDED PAD LAYOUT



mm (inches)	
F	1.70±0.05 (0.067±0.002)
G	0.78±0.05 (0.031±0.002)
K	1.91±0.10 (0.075±0.004)
M	0.54±0.025 (0.021±0.001)
N	1.93±0.05 (0.076±0.002)
P	0.21±0.04 (0.008±0.002)
R	1.80±0.04 (0.071±0.002)
S	0.20±0.04 (0.008±0.002)
D	0.60±0.10 (0.024±0.004)

TERMINAL AND LAYOUT (TOP VIEW)



*The recommended distance to the PCB Ground Plane is 0.254mm (0.010")
 ** PCB: Taconic Orcon RF-35P

Thin-Film RF/Microwave Filters

1206 High Performance Low Pass 8W

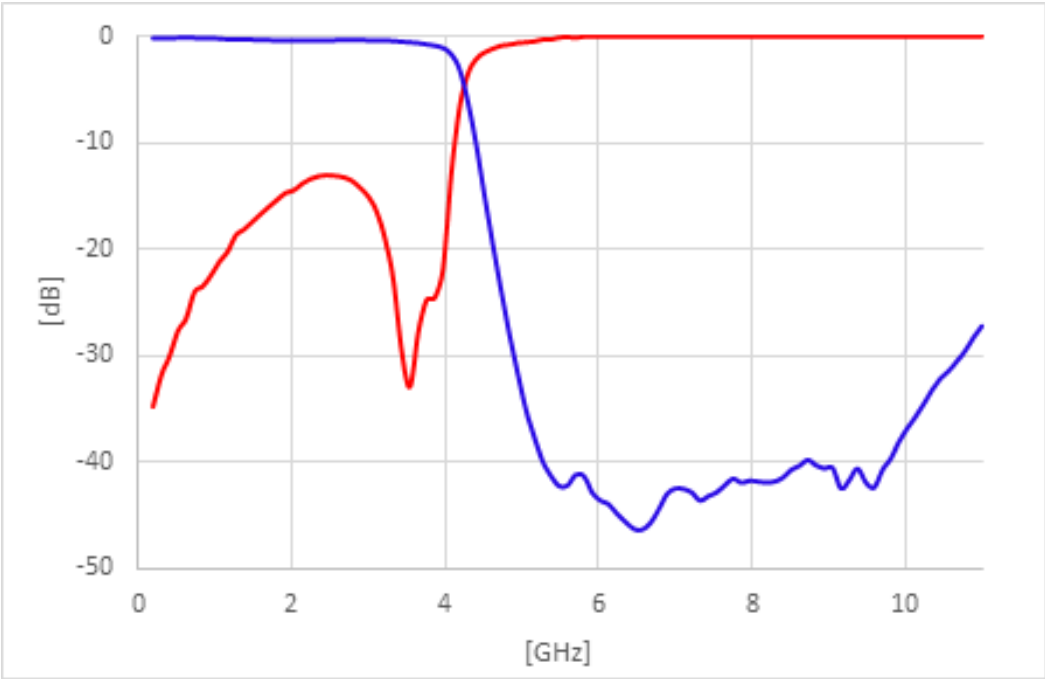
LP1206A3800ASTR – SMD Termination



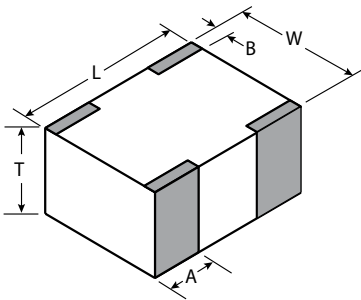
TYPICAL ELECTRICAL PERFORMANCE

P/N	I.Loss @ 3.6GHz	R.Loss @ 3.6GHz	Attenuation
LP1206A3800ASTR	0.8dB max.	-20dB	-35dB at 5.32GHz -28dB at 7.6GHz -33dB at 10GHz

Click here to return to main table.

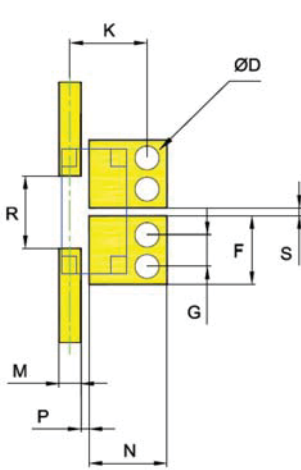


DIMENSIONS (TOP VIEW)



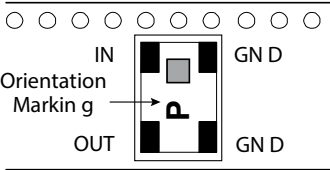
	mm (inches)
L	3.08±0.1 (0.121±0.004)
W	1.60±0.1 (0.063±0.004)
T	0.87±0.1 (0.034±0.004)
A	0.61±0.25 (0.028±0.010)
B	0.35±0.15 (0.014±0.006)

RECOMMENDED PAD LAYOUT



	mm
F	1.70±0.05 (0.067±0.002)
G	0.78±0.05 (0.031±0.002)
K	1.91±0.10 (0.075±0.004)
M	0.54±0.025 (0.021±0.001)
N	1.93±0.05 (0.076±0.002)
P	0.21±0.04 (0.008±0.002)
R	1.80±0.04 (0.071±0.002)
S	0.20±0.04 (0.008±0.002)
D	0.60±0.10 (0.024±0.004)

TERMINAL AND LAYOUT (TOP VIEW)



*The recommended distance to the PCB Ground Plane is 0.254mm (0.010")
 ** PCB: Taconic Orcer RF-35P