

## ATC 1206 LPF Series High Performance SMT Thin Film Low Pass Filter

### Features:

- Sharp Cut-off Response
- Excellent Stopband rejection
- Characteristic Impedance: 50Ω
- No External Matching
- Low Insertion Loss
- Power Rating: 8 W
- Low Profile SMT EIA Package
- Pb Free / RoHS Compliant

ATC's 1206 HP LPF Series High Performance Thin Film SMT Low Pass Filters offer superb high frequency performance in a low profile EIA style package. The 1206 HP LPF Series offers sharp cut-off response, excellent stopband rejection, low passband insertion loss with 50 ohm input and output impedance characteristics. Their superb performance makes them well suited for the most demanding wireless frequency applications.

The LPF 1206 filter Series is fully tested to meet or exceed electrical, environmental and mechanical specifications. They are supplied in tape and reel making them fully compatible with high speed automated pick-and-place manufacturing.

### Environmental Tests:

#### Static Humidity:

85 °C @ 85% RH for 160 hours

#### Life Test:

125 °C @ 0.5A for 4 hours



### Applications:

- Wireless Communications (Cellular and PCS)
- Wireless LANs
- Public Safety Radio (P25)
- LTE
- ISM
- Global Navigation Satellite Systems (GNSS)

Part Number	Passband (MHz)
LPF1206HP0700STT	0 to 700
LPF1206HP0860STT	0 to 860
LPF1206HP3200STT	0 to 3200
LPF1206HP3500STT	0 to 3500
LPF1206HP3600STT	0 to 3600
LPF1206HP3800STT	0 to 3800



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ATC # 001-1178  
Rev. B, 4/18

# ATC 1206 HIGH PERFORMANCE LOW PASS FILTER

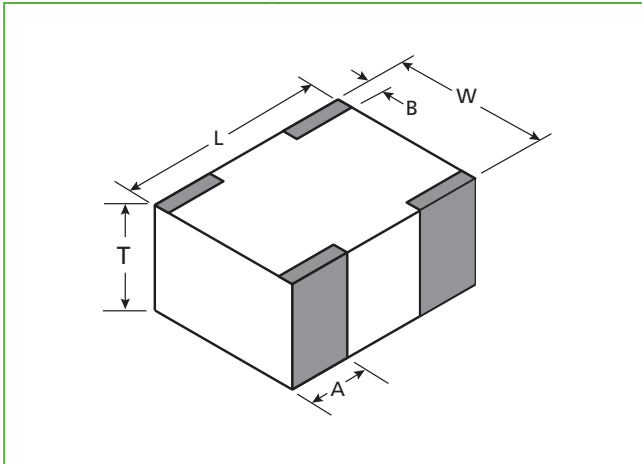
## Dimensions

Size (EIA)	Length (L)	Width (W)	Thickness (T)
1206	0.121 ± 0.004 (3.07 ± 0.10)	0.063 ± 0.004 (1.60 ± 0.10)	0.034 ± 0.004 (0.86 ± 0.1)

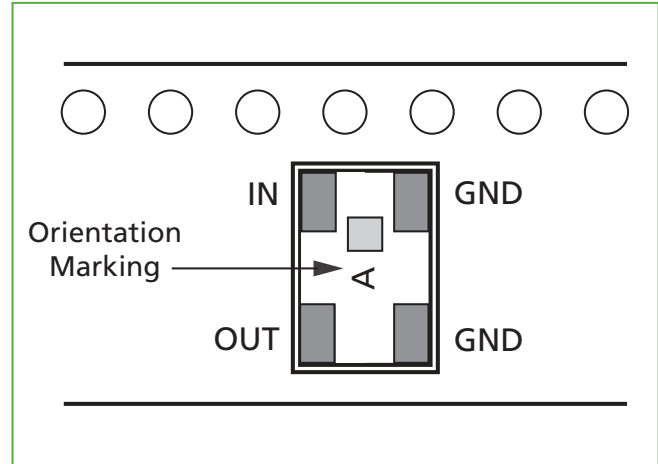
inches (mm)

A	B
0.028 ± 0.010 (0.71 ± 0.25)	0.014 ± 0.006 (0.36 ± 0.15)

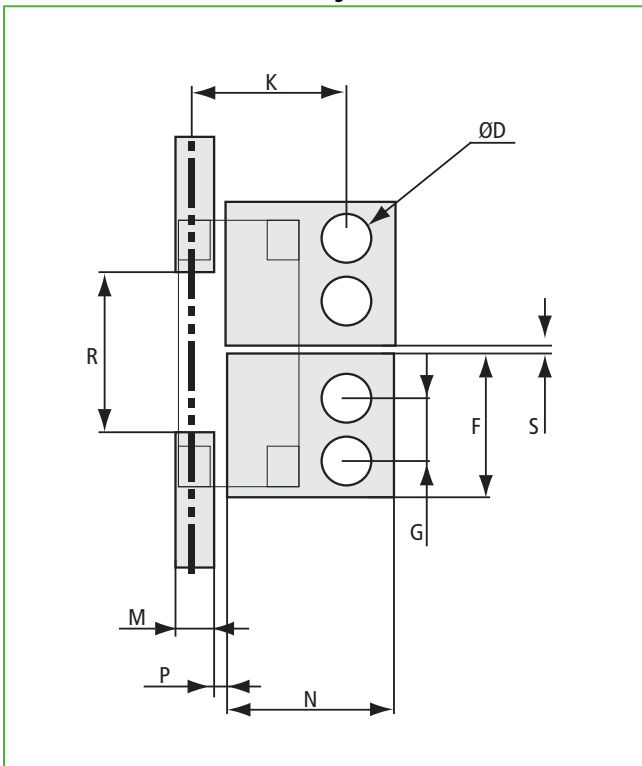
## Mechanical Configurations



## Terminals and Orientation in Tape (Top View)



## Recommended Pad Layout Dimensions



## Dimensions

inches (mm)

F	0.067 ± 0.002 (1.70 ± 0.05)
G	0.031 ± 0.002 (0.79 ± 0.05)
K	0.075 ± 0.004 (1.91 ± 0.10)
M	0.021 ± 0.001 (0.53 ± 0.025)
N	0.076 ± 0.002 (1.93 ± 0.05)
P	0.008 ± 0.002 (0.20 ± 0.05)
R	0.071 ± 0.002 (1.80 ± 0.04)
S	0.008 ± 0.002 (0.20 ± 0.04)
D	0.024 ± 0.004 (0.61 ± 0.10)



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## Electrical Characteristics

LPF1206HP0700STT	
Cutoff Frequency	700 MHz
Rejection @ 2800 MHz	-30 dB
Insertion Loss	0.8 dB
Return Loss	-20 dB
Power Rating	8 W, CW
Impedance	50 ohms
Operating Temperature	-40 °C to + 85 °C

LPF1206HP0860STT	
Cutoff Frequency	860 MHz
Rejection @ 3400 MHz	-30 dB
Insertion Loss	0.85 dB
Return Loss	-18 dB
Power Rating	8 W, CW
Impedance	50 ohms
Operating Temperature	-40 °C to + 85 °C

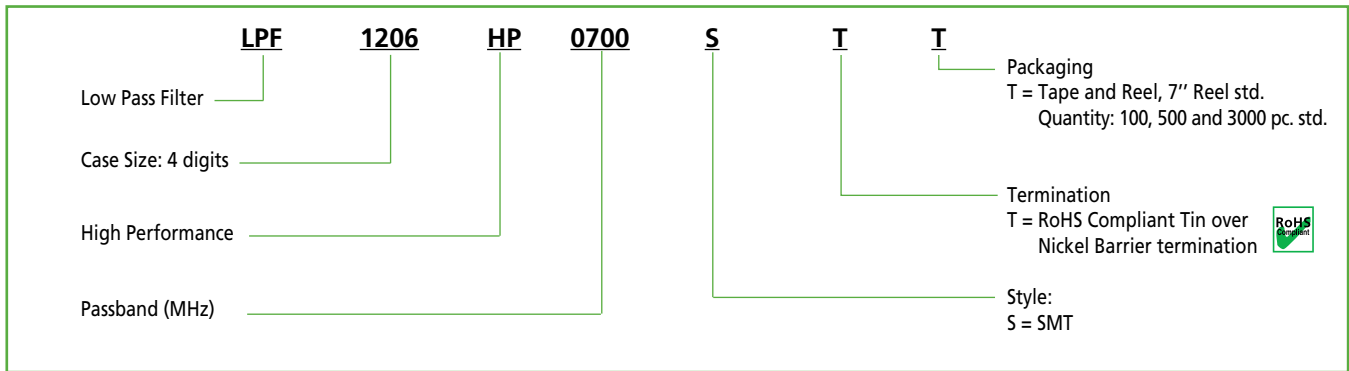
LPF1206HP3200STT	
Cutoff Frequency	3200 MHz
Rejection @ 10 GHz	-25 dB
Insertion Loss	0.85 dB
Return Loss	-20 dB
Power Rating	8 W, CW
Impedance	50 ohms
Operating Temperature	-40 °C to + 85 °C

LPF1206HP3500STT	
Cutoff Frequency	3500 MHz
Rejection @ 11 GHz	-15 dB
Insertion Loss	0.7 dB
Return Loss	-18 dB
Power Rating	8 W, CW
Impedance	50 ohms
Operating Temperature	-40 °C to + 85 °C

LPF1206HP3600STT	
Cutoff Frequency	3600 MHz
Rejection @ 10.8 GHz	-25 dB
Insertion Loss	0.7 dB
Return Loss	-25 dB
Power Rating	8 W, CW
Impedance	50 ohms
Operating Temperature	-40 °C to + 85 °C

LPF1206HP3800STT	
Cutoff Frequency	3800 MHz
Rejection @ 10 GHz	-33 dB
Insertion Loss	0.8 dB
Return Loss	-20 dB
Power Rating	8 W, CW
Impedance	50 ohms
Operating Temperature	-40 °C to + 85 °C

## ATC Part Number Code



The above part number refers to a Low Pass Filter, (EIA case size 1206), High Performance, Passband DC to 700 MHz, SMT (S) Style, Tin Termination

ATC accepts orders for our parts using designations *with* or *without* the "ATC" prefix. Both methods of defining the part number are equivalent, i.e., part numbers referenced with the "ATC" prefix are interchangeable to parts referenced without the "ATC" prefix. Customers are free to use either in specifying or procuring parts from American Technical Ceramics.

For additional information and catalogs contact your ATC representative or call direct at +1-631-622-4700.

Consult factory for additional performance data.



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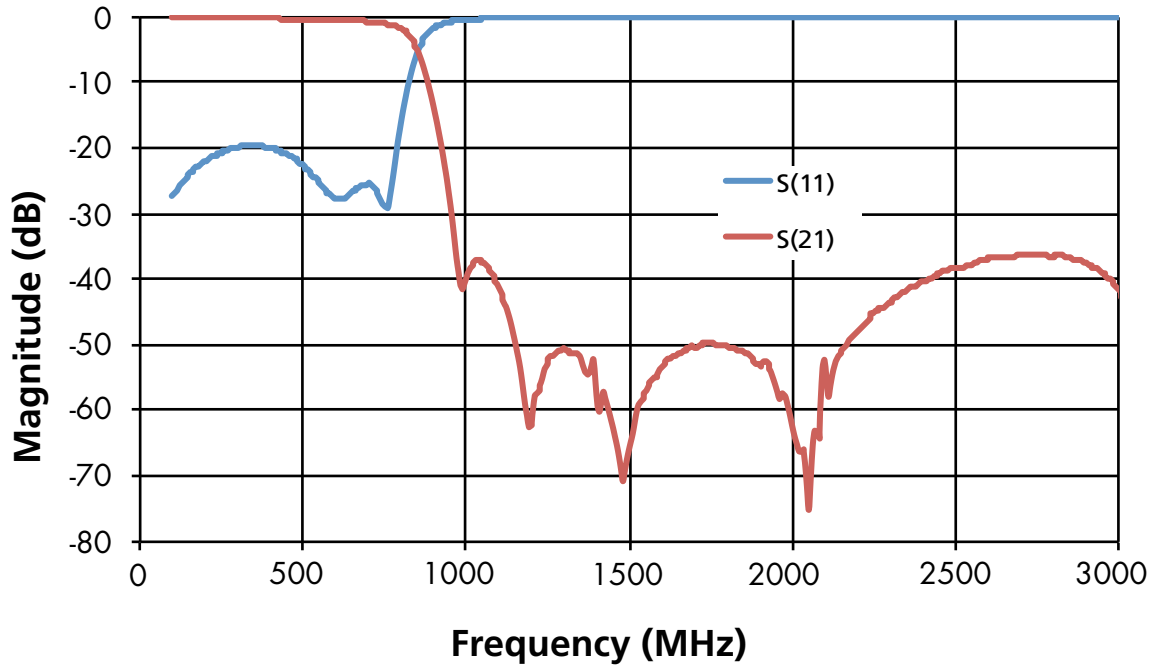
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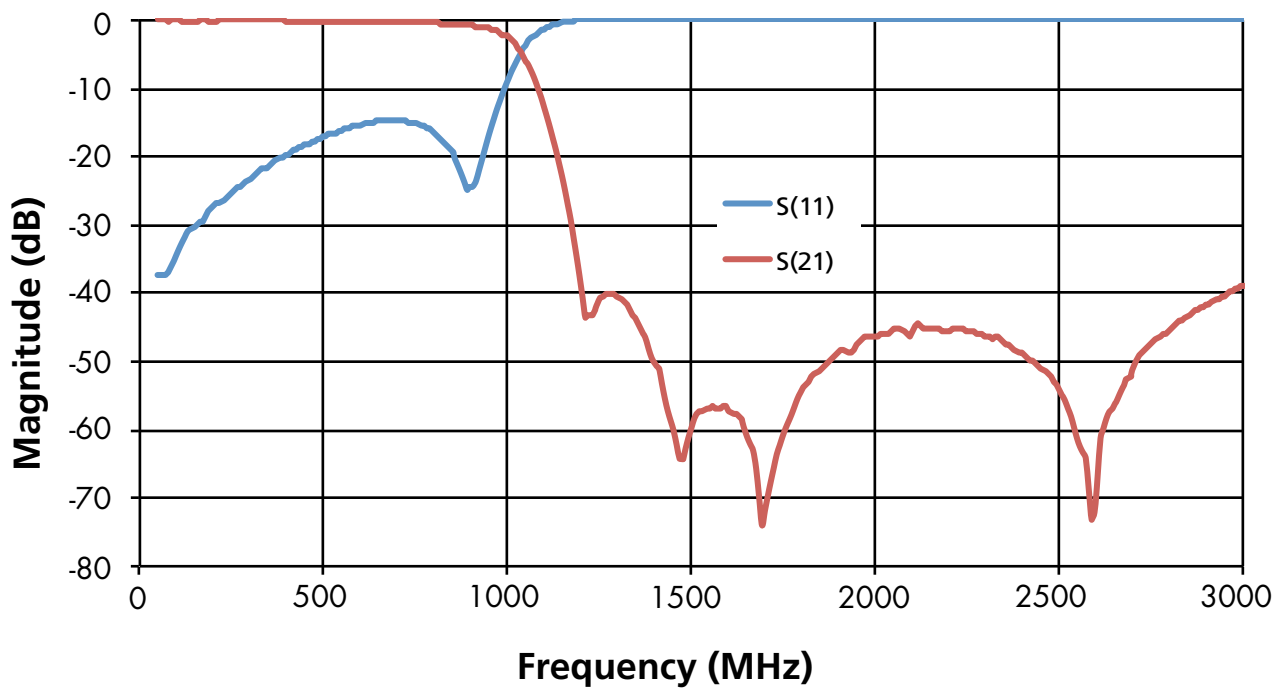
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**ATC LPF1206HP0700S**  
**Passband 0 to 700 MHz**



**ATC LPF1206HP0860S**  
**Passband 0 to 860 MHz**



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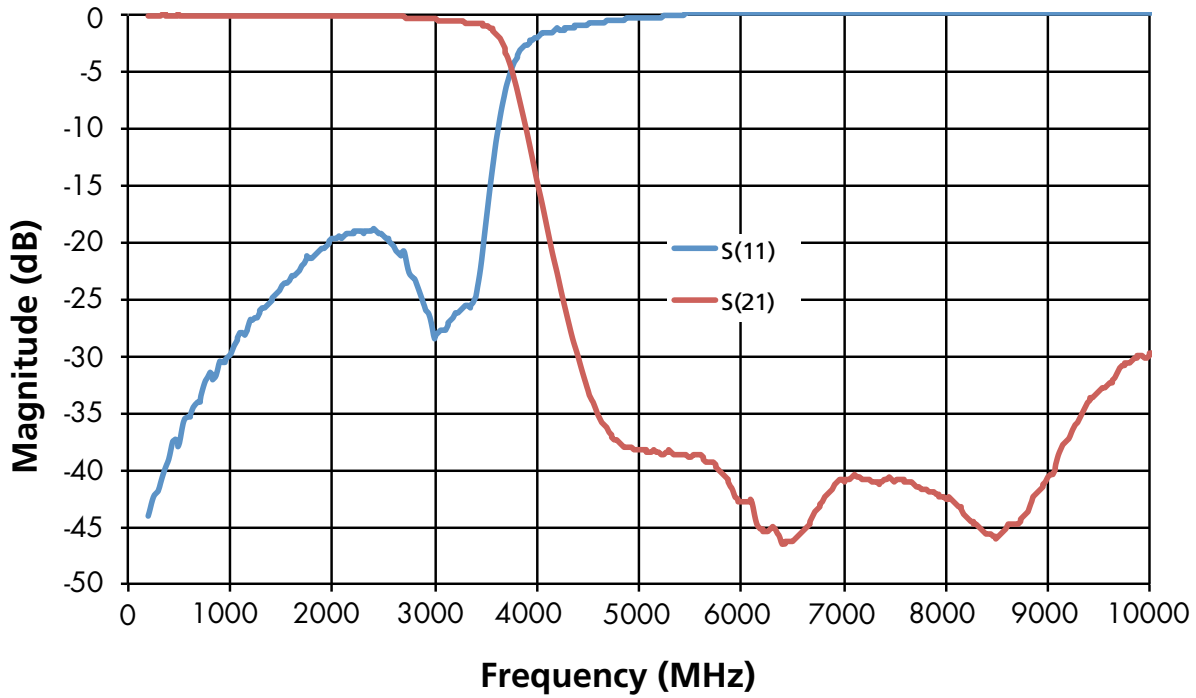
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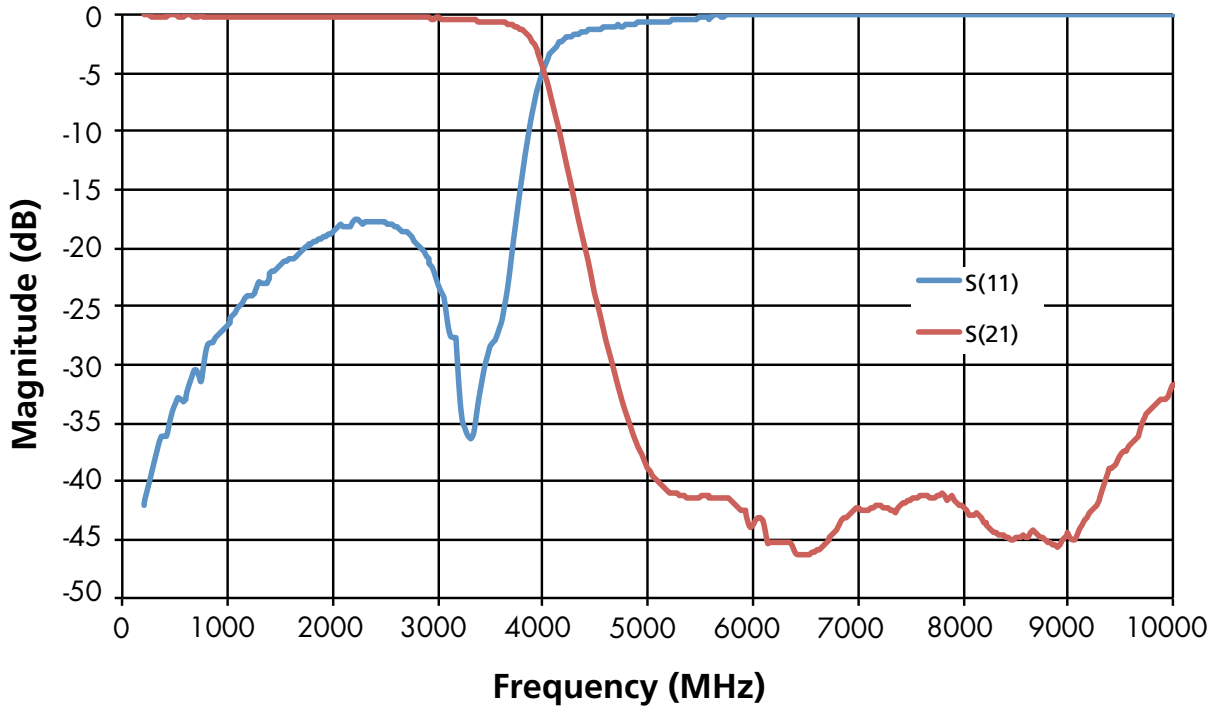
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**ATC LPF1206HP3200S**  
**Passband 0 to 3200 MHz**



**ATC LPF1206HP3500S**  
**Passband 0 to 3500 MHz**



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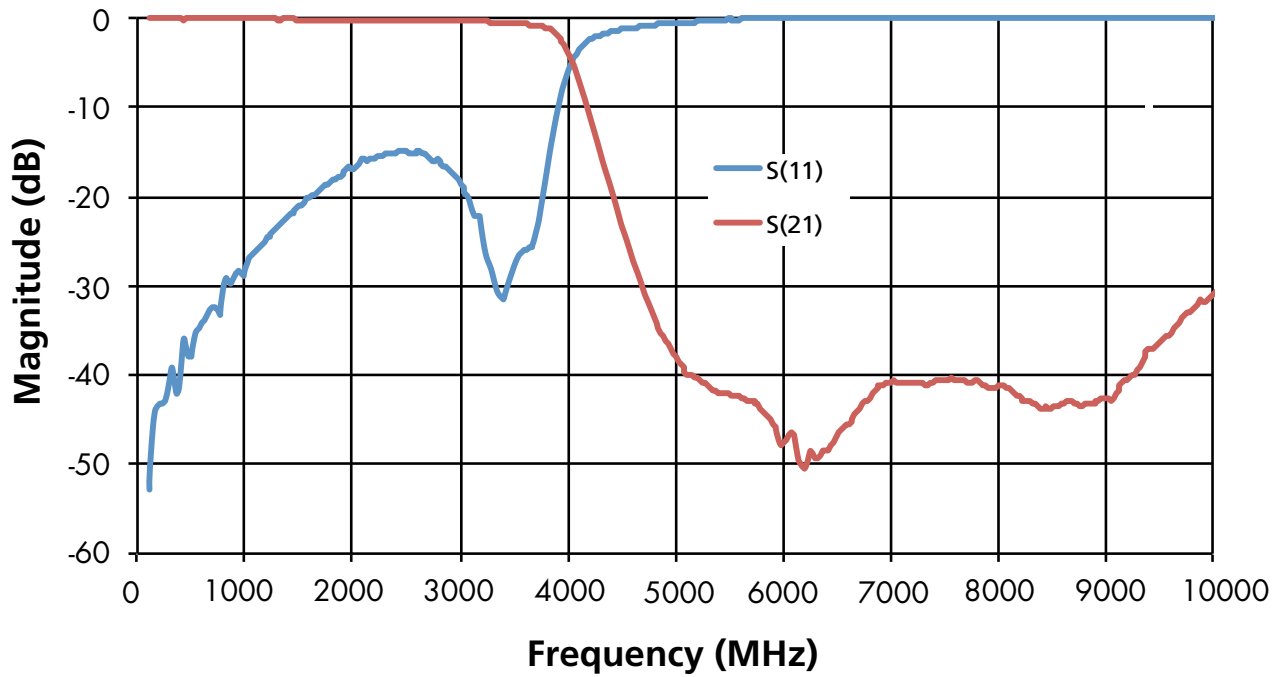


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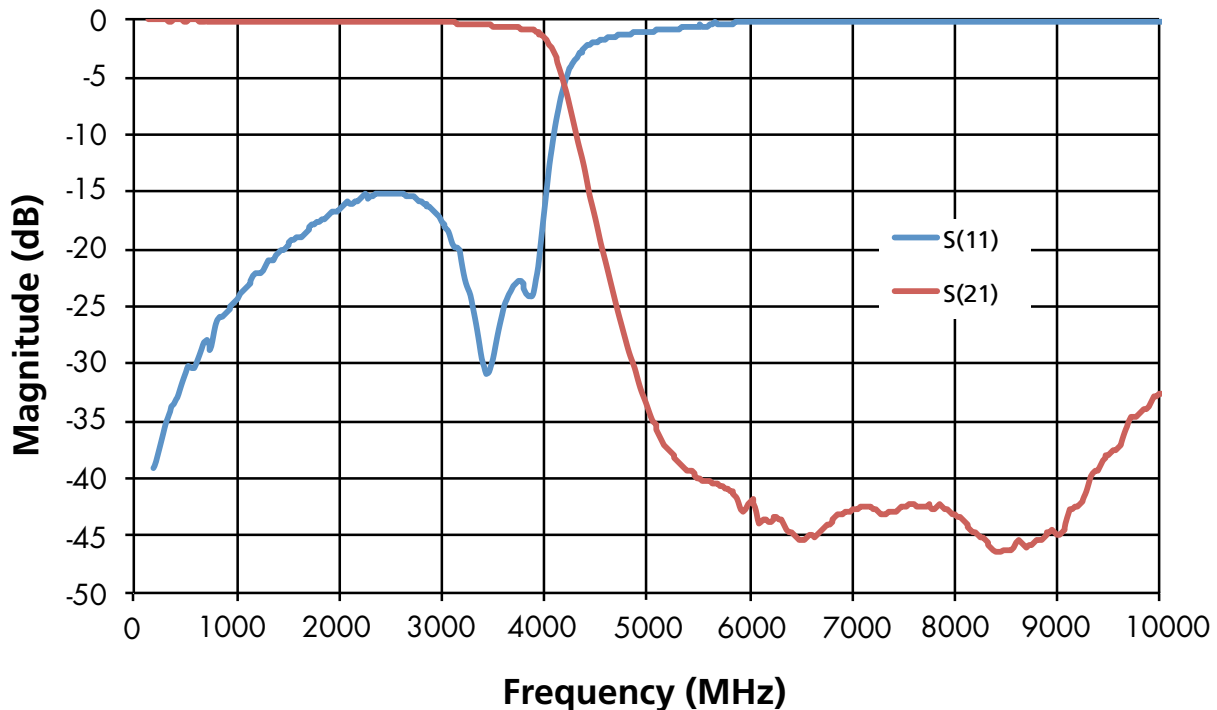
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## ATC LPF1206HP3600S Passband 0 to 3600 MHz



## ATC LPF1206HP3800S Passband 0 to 3800 MHz



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