

ATC 1206 LPF Series High Performance Thin Film Low Pass Filter

Features:

- Sharp Cut-off Response
- Excellent Stopband rejection
- Characteristic Impedance: 50Ω
- No External Matching
- Low Insertion Loss
- Power Rating: 12 W
- Low Profile LGA 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.



Applications:

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

| Part Number | Passband (MHz) |
|---------------|----------------|
| LPF1206HP0512 | 0 to 512 |
| LPF1206HP0700 | 0 to 700 |
| LPF1206HP6000 | 0 to 6000 |



AMERICAN TECHNICAL CERAMICS

ATC // AVX Thin Film Technologies

ATC North America

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ATC # 001-1157
Rev. C, 7/17

ATC 1206 HIGH PERFORMANCE LOW PASS FILTER

Dimensions

LPF1206HP0512 & LPF1206HP0700

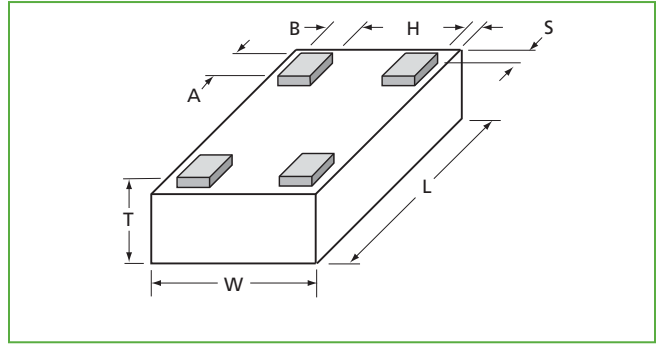
| Size (EIA) | Length (L) | Width (W) | Thickness (T) |
|------------|--------------------------------|--------------------------------|--------------------------------|
| 1206 | 0.122 ± 0.004 (3.10 ± 0.10) | 0.063 ± 0.004 (1.60 ± 0.10) | 0.024 ± 0.012 (0.60 ± 0.30) |

inches (mm)

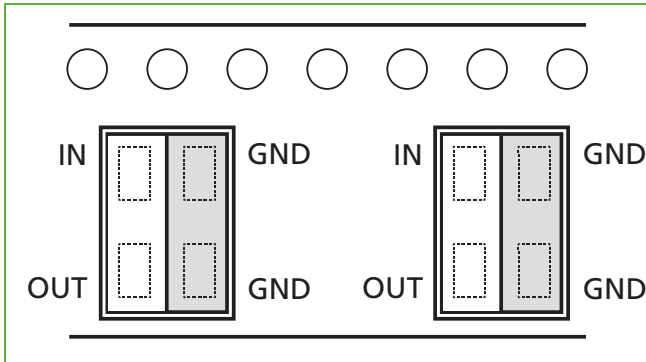
| A | B | H, S |
|--------------------------------|--------------------------------|--------------------------------|
| 0.015 ± 0.004 (0.39 ± 0.10) | 0.013 ± 0.004 (0.33 ± 0.10) | 0.002 ± 0.002 (0.05 ± 0.05) |

Mechanical Configurations

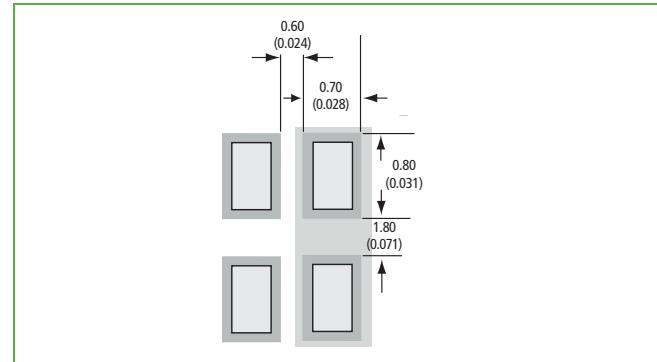
LPF1206HP0512 & LPF1206HP0700



Terminals and Orientation in Tape (Top View)



Recommended Pad Layout Dimensions



Dimensions

LPF1206HP6000

| Size (EIA) | Length (L) | Width (W) | Thickness (T) |
|------------|--------------------------------|--------------------------------|--------------------------------|
| 1206 | 0.122 ± 0.004 (3.10 ± 0.10) | 0.063 ± 0.004 (1.60 ± 0.10) | 0.024 ± 0.012 (0.60 ± 0.30) |

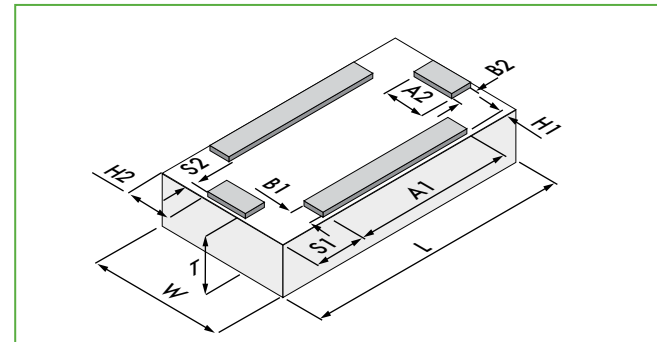
inches (mm)

| A1 | A2 | B1, B2 |
|------------------------------|-----------------------------|-------------------------------|
| 0.075 ± 0.004 (1.9 ± 0.1) | 0.02 ± 0.004 (0.5 ± 0.1) | 0.010 ± 0.004 (0.25 ± 0.1) |

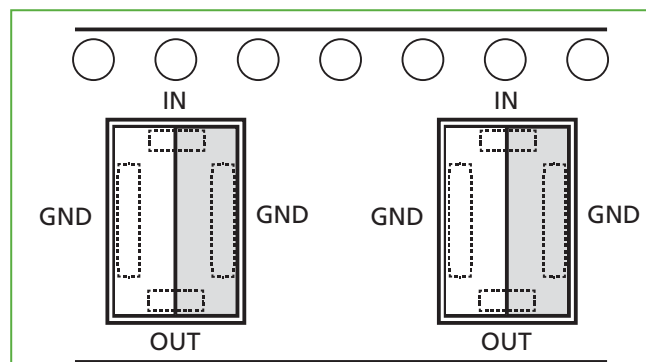
| H1 | H2 | S1 | S2 |
|--------------------------------|--------------------------------|-------------------------------|--------------------------------|
| 0.002 ± 0.002 (0.06 ± 0.06) | 0.022 ± 0.004 (0.56 ± 0.10) | 0.024 ± 0.004 (0.61 ± 0.1) | 0.002 ± 0.002 (0.06 ± 0.06) |

Mechanical Configurations

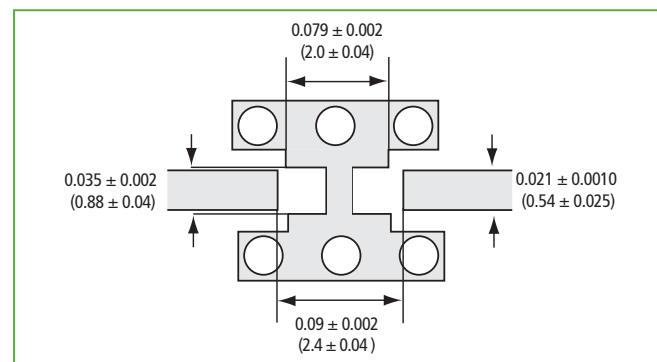
LPF1206HP6000



Terminals and Orientation in Tape (Top View)



Recommended Pad Layout Dimensions



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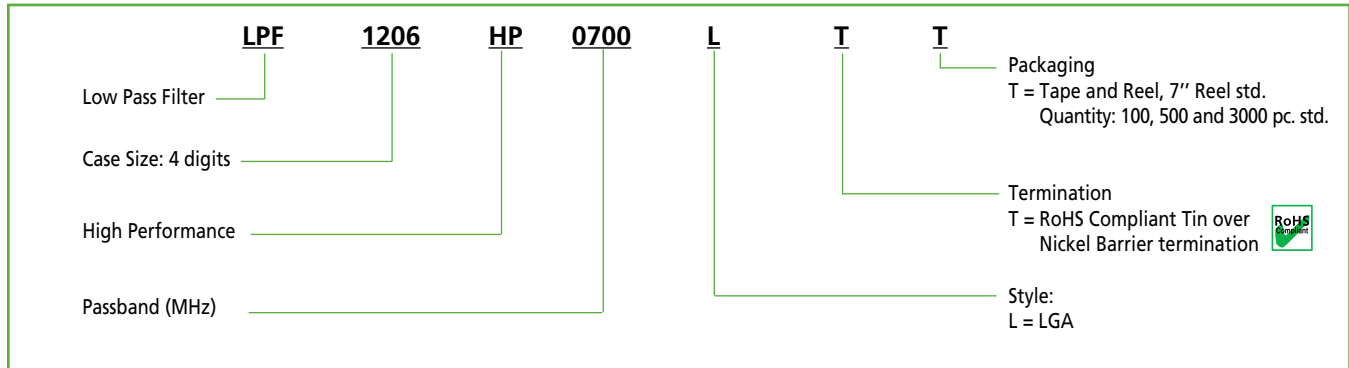
Electrical Characteristics

| LPF1206HP0512 | |
|-----------------------|----------------|
| Cutoff Frequency | 512 MHz |
| Rejection @ 720 MHz | -35 dB |
| Insertion Loss | 0.8 dB |
| Return Loss | 20 dB |
| Power Handling | 12 W, CW |
| Impedance | 50 ohms |
| Operating Temperature | -40 to + 85 °C |

| LPF1206HP0700 | |
|-----------------------|----------------|
| Cutoff Frequency | 700 MHz |
| Rejection @ 900 MHz | -35 dB |
| Insertion Loss | 0.9 dB |
| Return Loss | 20 dB |
| Power Handling | 12 W, CW |
| Impedance | 50 ohms |
| Operating Temperature | -40 to + 85 °C |

| LPF1206HP6000 | |
|-----------------------|-----------------|
| Cutoff Frequency | 6000 MHz |
| Rejection @ 8400 MHz | -35 dB |
| Insertion Loss | -0.6 dB |
| Return Loss | 20 dB |
| Power Handling | 12 W, CW |
| Impedance | 50 ohms |
| Operating Temperature | -40 to + 100 °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, LGA (L) 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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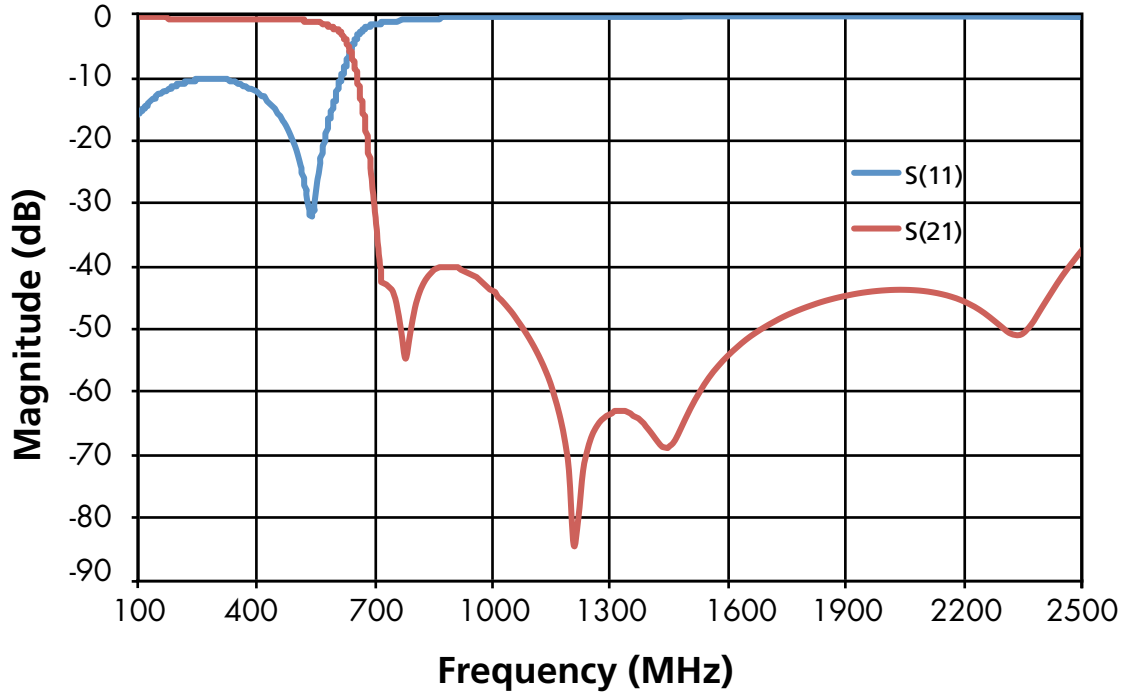
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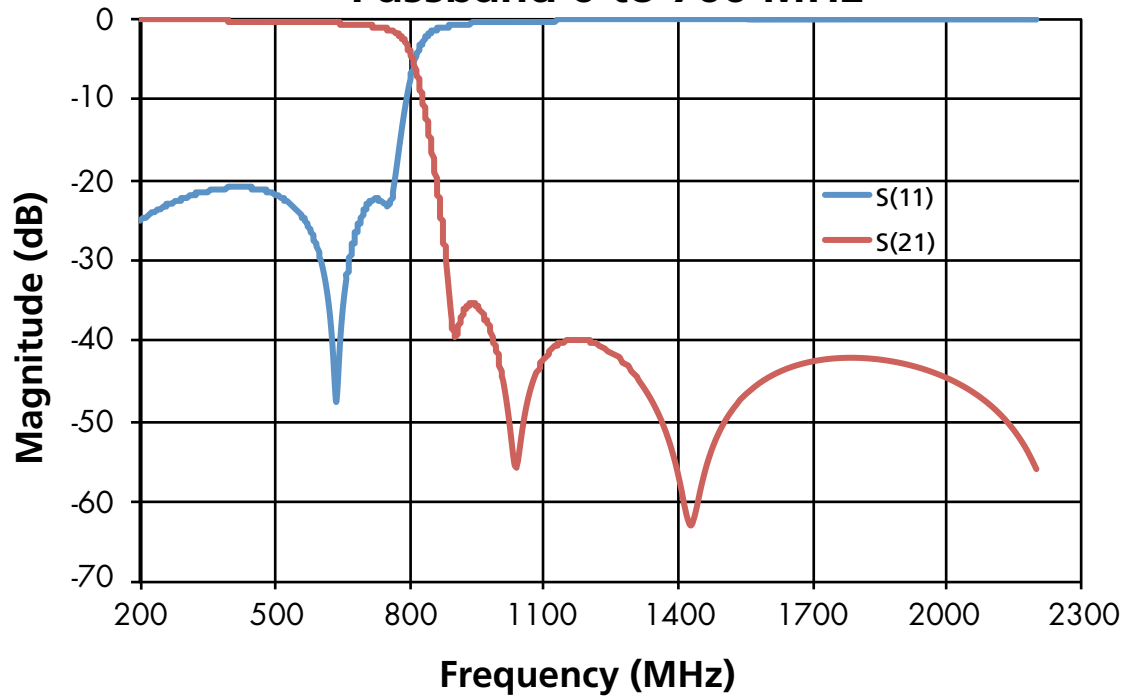
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**ATC LPF1206HP0512
Passband 0 to 512 MHz**



**ATC LPF1206HP0700
Passband 0 to 700 MHz**



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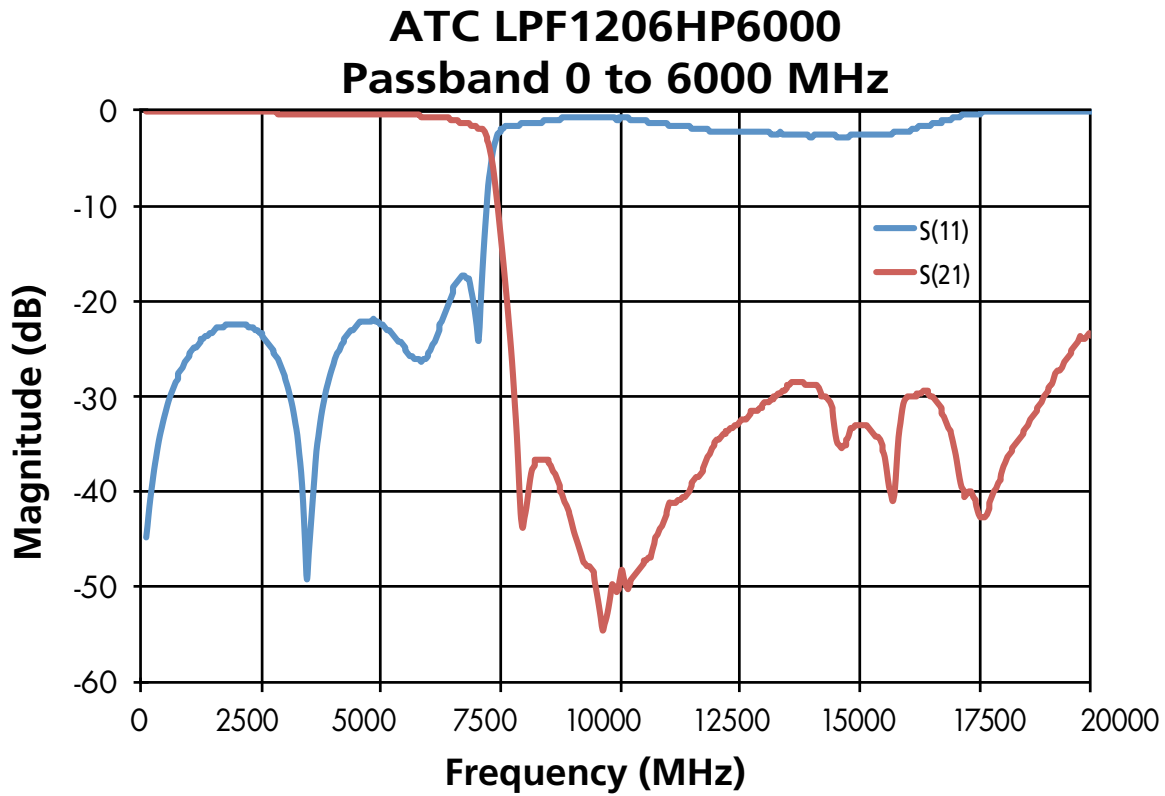
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