

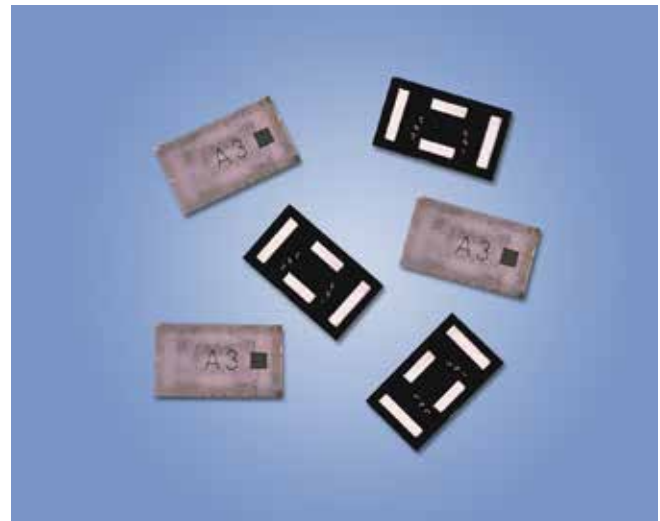
## ATC 2816 LPF Series High Performance SMT Thin Film Low Pass Filter

### Features:

- Sharp Cut-off Response
- Excellent Stopband Rejection
- Characteristic Impedance: 50  $\Omega$
- No External Matching
- Low Insertion Loss
- Power Rating: 15 W
- Low Profile SMT EIA Package
- Pb Free / RoHS Compliant

ATC's 2816 HP LPF High Performance Thin Film SMT Low Pass Filter Series offers superb high frequency performance in a low profile EIA style package. The 2816 HP LPF Series provides the highest continuous power rating in class with 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 high power wireless frequency applications.

The LPF 2816 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:

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

Part Number	Passband (MHz)
LPF2816HP0512LTT	0 to 512
LPF2816HP0680LTT	0 to 680
LPF2816HP1300LTT	0 to 1300
LPF2816HP1400LTT	0 to 1400
LPF2816HP1600LTT	0 to 1600
LPF2816HP1700LTT	0 to 1700
LPF2816HP1800LTT	0 to 1800
LPF2816HP1900LTT	0 to 1900



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ATC // AVX Thin Film Technologies

tfsales@atceramics.com

ATC North America

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ATC # 001-1178  
Rev. A, 3/17

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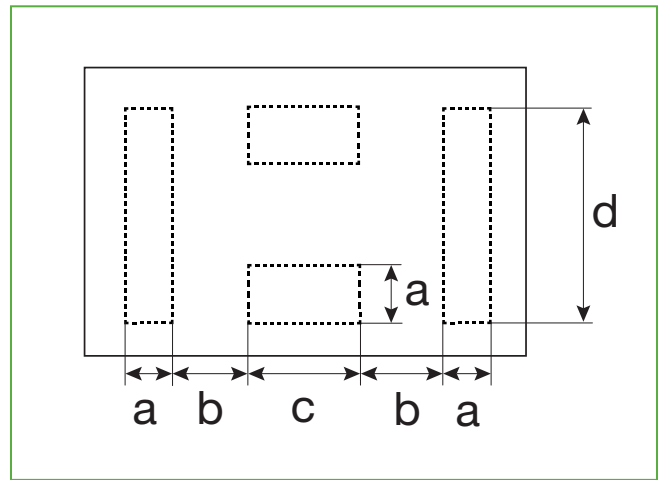
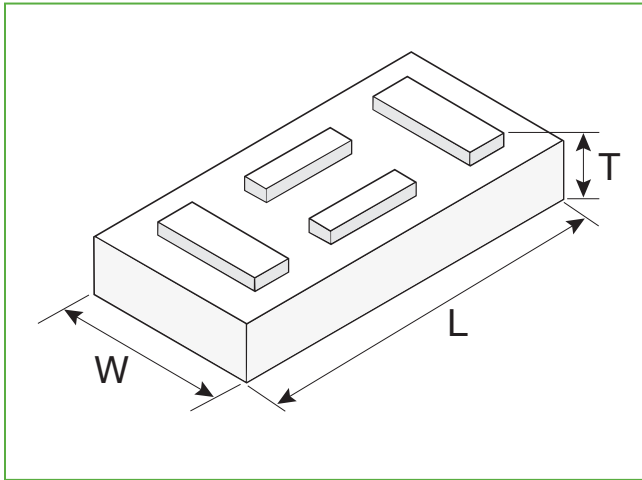
# ATC 2816 HIGH PERFORMANCE LOW PASS FILTER

## Dimensions *inches (mm)*

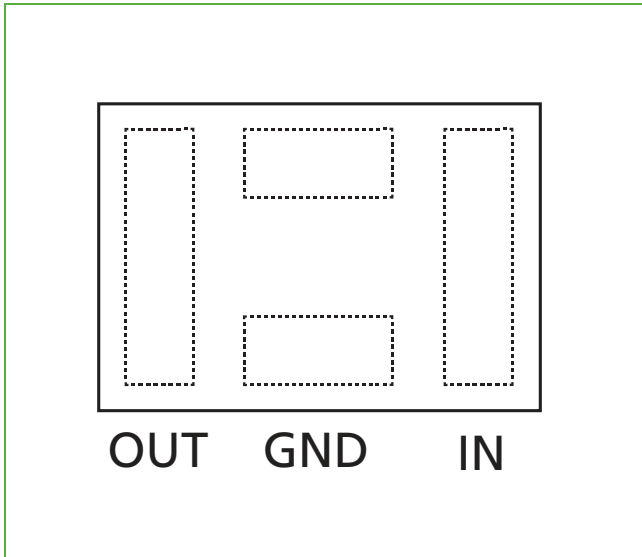
Size (EIA)	Length (L)	Width (W)	Thickness (T)
2816	7.00 ± 0.30 (0.276 ± 0.012)	4.00 ± 0.20 (0.157 ± 0.008)	1.2 max (0.047 max)

a	b	c	d
0.60 ± 0.15 (0.024 ± 0.006)	1.40 ± 0.15 (0.055 ± 0.006)	2.00 ± 0.15 (0.079 ± 0.006)	3.00 ± 0.15 (0.118 ± 0.006)

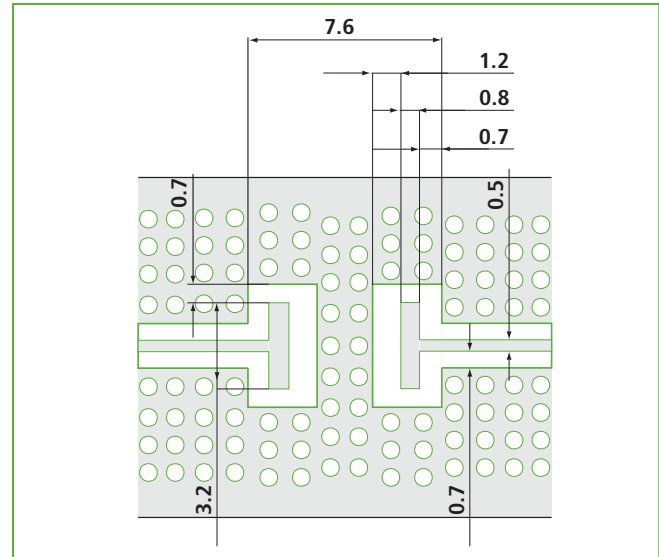
## Mechanical Configurations (Bottom View)



## Terminals (Top View)



## Recommended Pad Layout Dimensions



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## Electrical Characteristics

LP2816HP0512LTT	
Cutoff Frequency	512 MHz
Rejection @ 720 MHz	-40 dB
Insertion Loss	-0.85 dB
Return Loss	-18 dB
Power Handling	15 W
Impedance	50 ohms
Operating Temperature	-40 to + 85 °C

LP2816HP0680LTT	
Cutoff Frequency	680 MHz
Rejection @ 950 MHz	-36 dB
Insertion Loss	-0.7 dB
Return Loss	-23 dB
Power Handling	15 W
Impedance	50 ohms
Operating Temperature	-40 to + 85 °C

LP2816HP1300LTT	
Cutoff Frequency	1300 MHz
Rejection @ 1.82 GHz	-40 dB
Insertion Loss	-0.85 dB
Return Loss	-15 dB
Power Handling	15 W
Impedance	50 ohms
Operating Temperature	-40 to + 85 °C

LP2816HP1400LTT	
Cutoff Frequency	1400 MHz
Rejection @ 900 MHz	-35 dB
Insertion Loss	-0.75 dB
Return Loss	-15 dB
Power Handling	15 W
Impedance	50 ohms
Operating Temperature	-40 to + 85 °C

LP2816HP1600LTT	
Cutoff Frequency	1600 MHz
Rejection @ 2.24 GHz	-45 dB
Insertion Loss	-0.8 dB
Return Loss	-20 dB
Power Handling	15 W
Impedance	50 ohms
Operating Temperature	-40 to + 85 °C

LP2816HP1700LTT	
Cutoff Frequency	1700 MHz
Rejection @ 2.38 GHz	-30 dB
Insertion Loss	-0.85 dB
Return Loss	-14 dB
Power Handling	15 W
Impedance	50 ohms
Operating Temperature	-40 to + 85 °C

LP2816HP1800LTT	
Cutoff Frequency	1800 MHz
Rejection @ 2.52 GHz	-19 dB
Insertion Loss	-0.75 dB
Return Loss	-20 dB
Power Handling	15 W
Impedance	50 ohms
Operating Temperature	-40 to + 85 °C

LP2816HP1900LTT	
Cutoff Frequency	1900 MHz
Rejection @ 2.66 GHz	-35 dB
Insertion Loss	-0.8 dB
Return Loss	-23 dB
Power Handling	15 W
Impedance	50 ohms
Operating Temperature	-40 to + 85 °C



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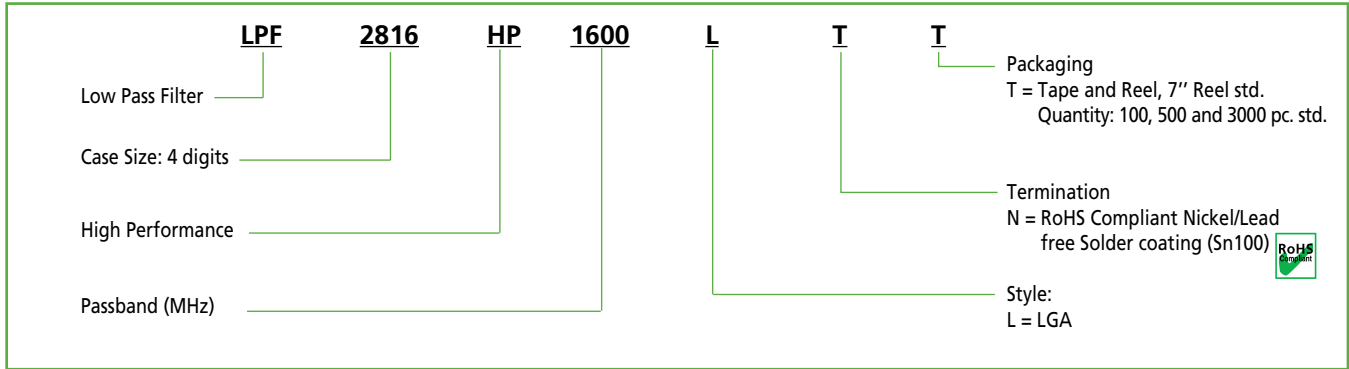
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# ATC 2816 HIGH PERFORMANCE LOW PASS FILTER

## ATC Part Number Code

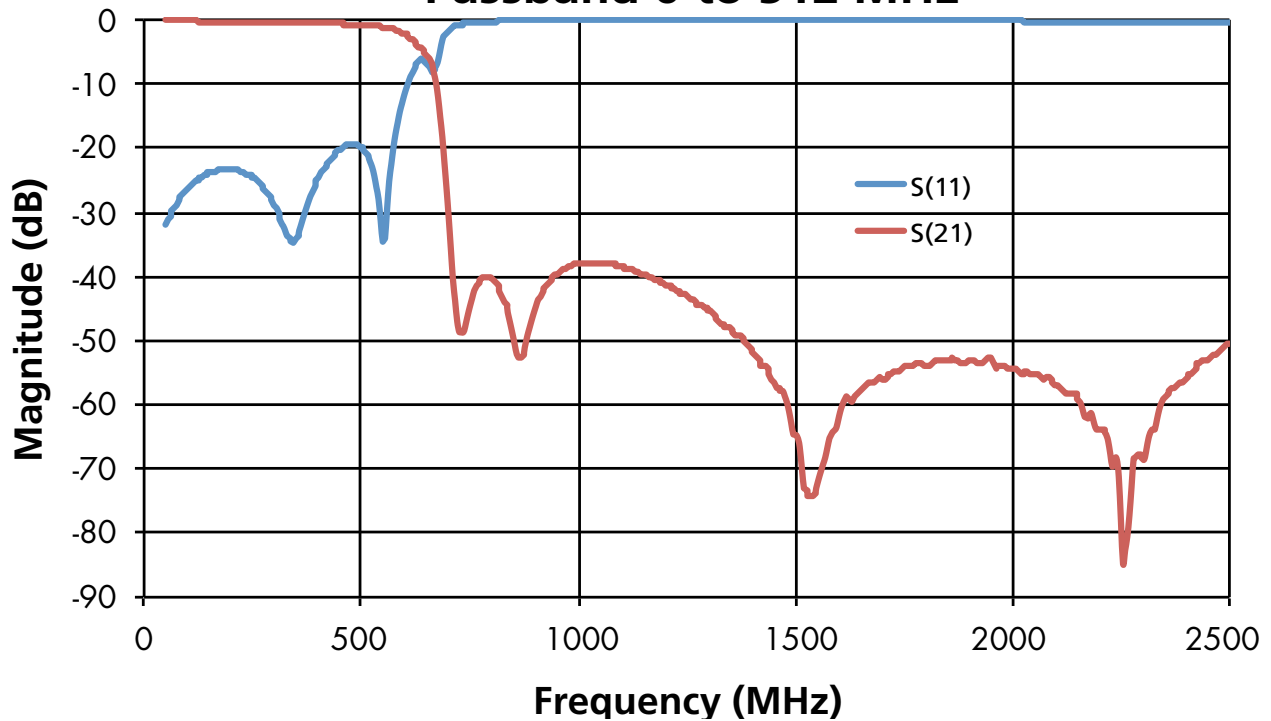


The above part number refers to a Low Pass Filter, (EIA case size 2816), High Performance, Passband DC to 700 MHz, LGA (L) Style, Tin Termination

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.

## ATC LPF2816HP0512LTT Passband 0 to 512 MHz



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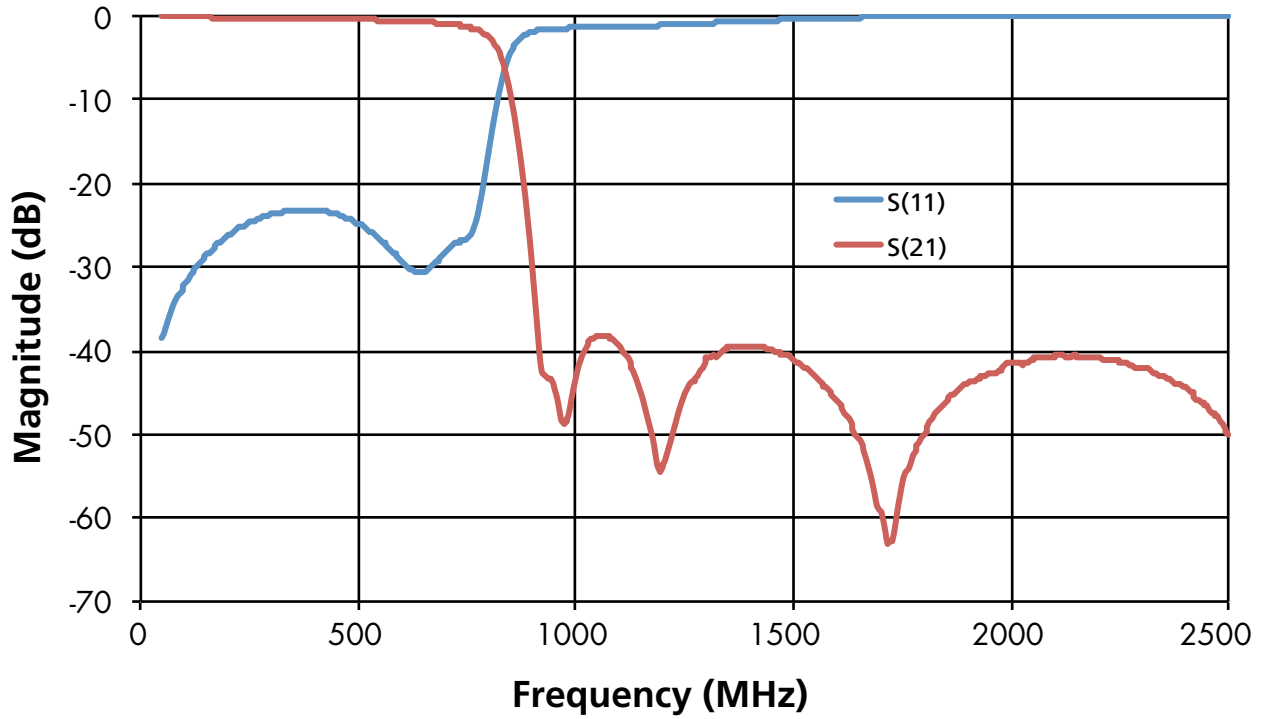


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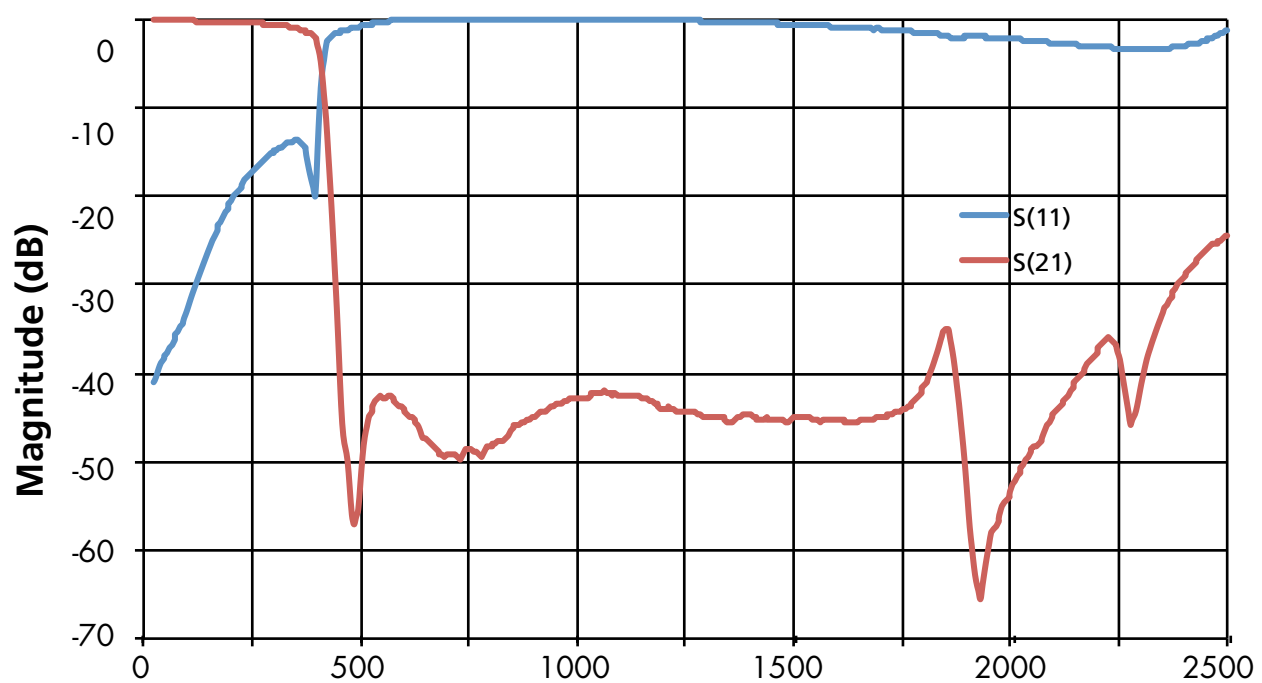
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**ATC LPF2816HP0680LTT**  
**Passband 0 to 680 MHz**



**ATC LPF2816HP1300LTT**  
**Passband 0 to 1300 MHz**



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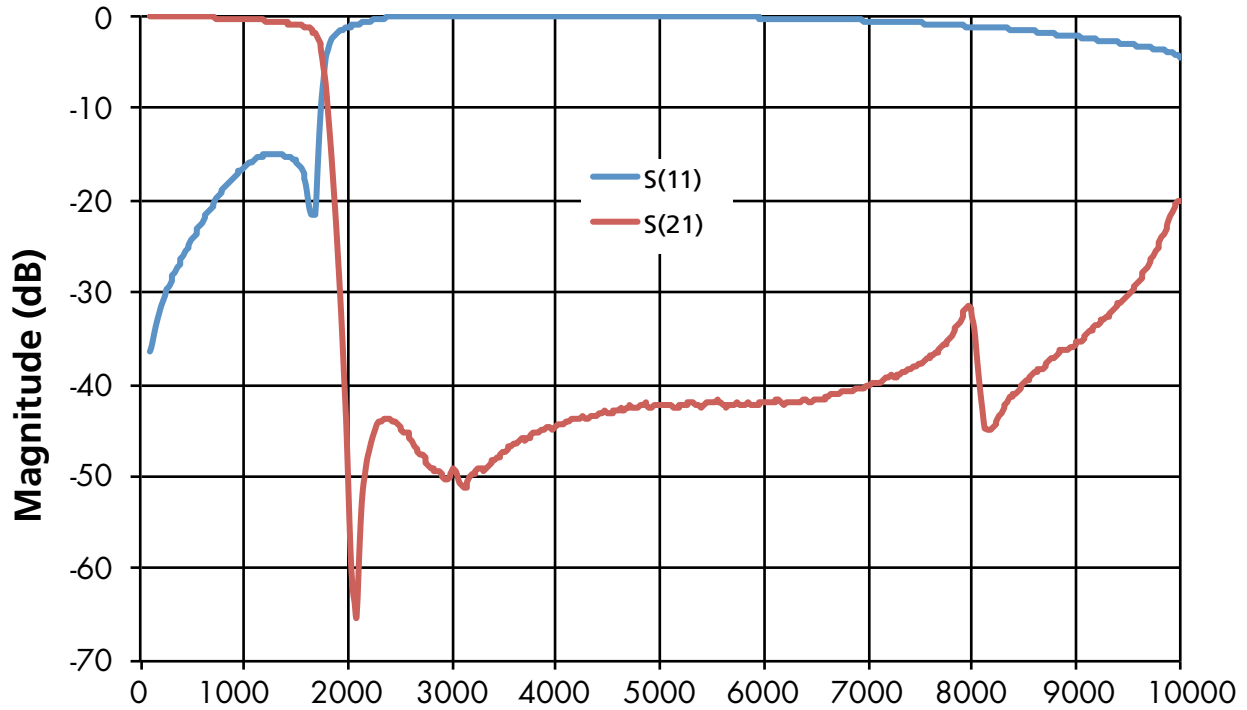


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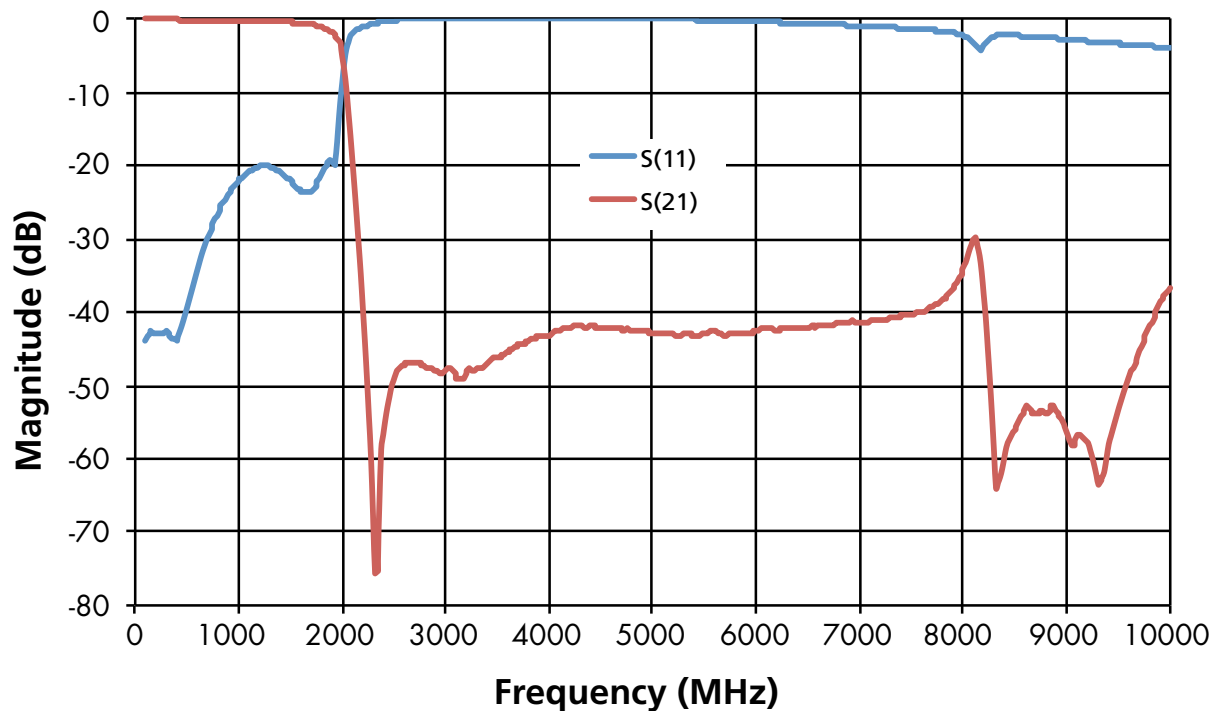
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**ATC LPF2816HP1400LTT**  
**Passband 0 to 1400 MHz**



**ATC LPF2816HP1600LTT**  
**Passband 0 to 1600 MHz**



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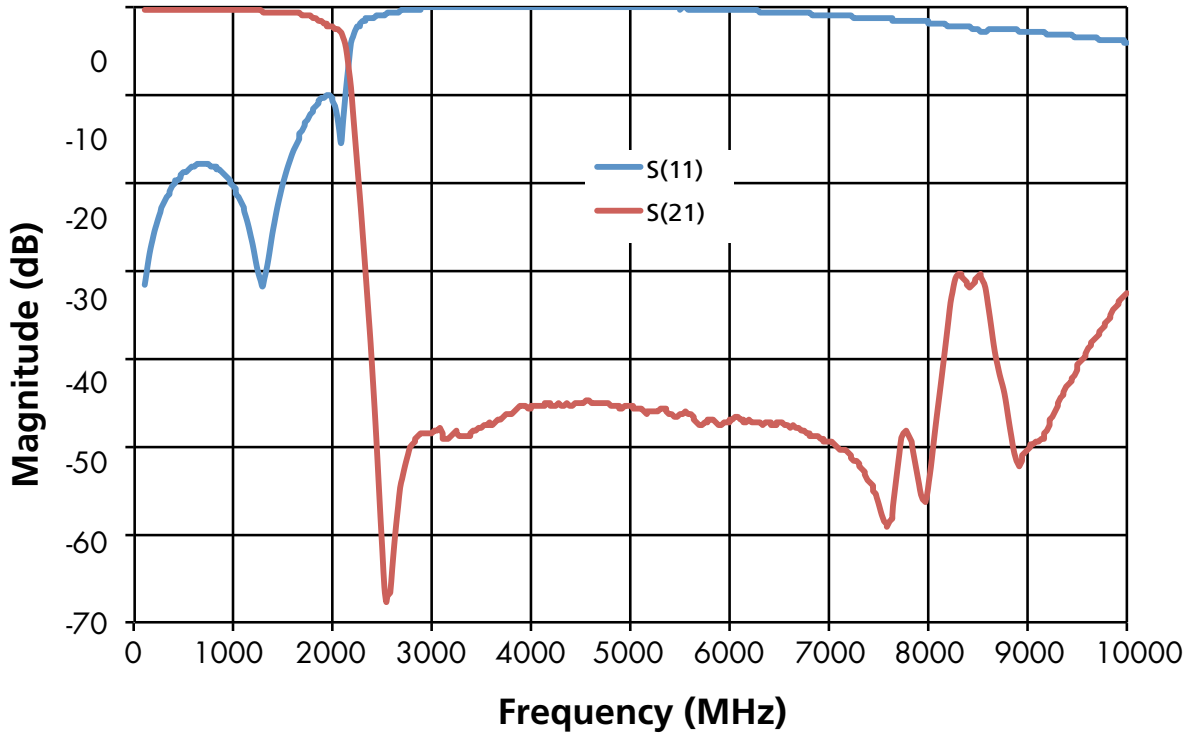


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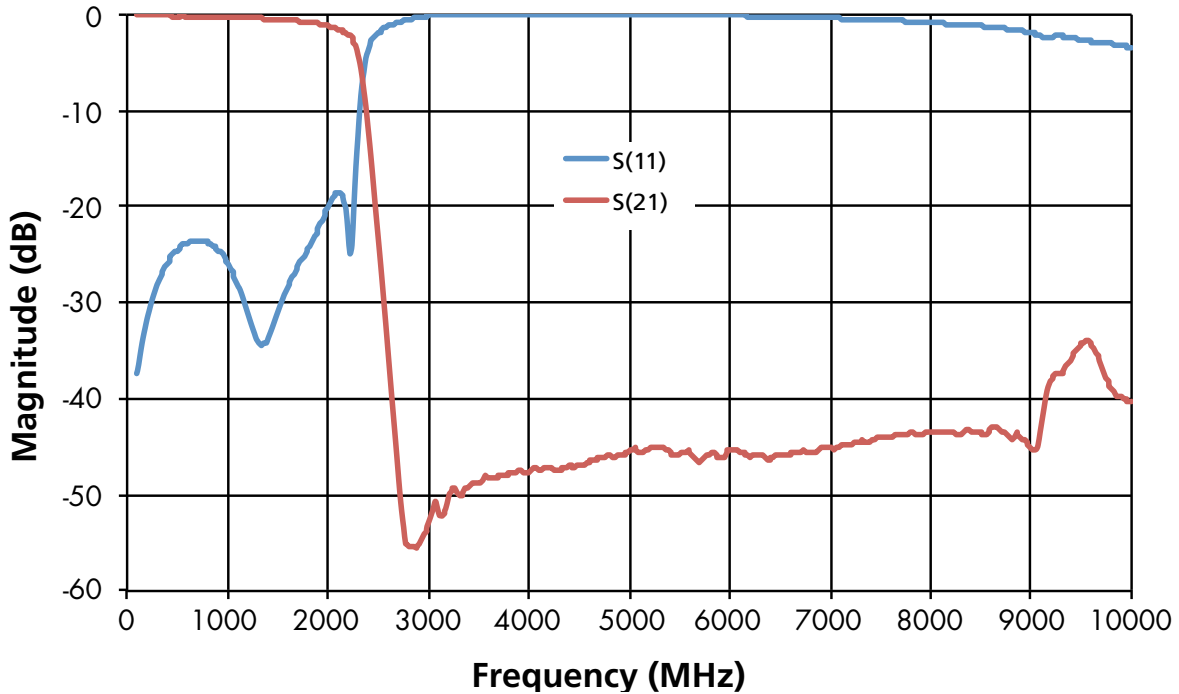
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**ATC LPF2816HP1700LTT**  
**Passband 0 to 1700 MHz**



**ATC LPF2816HP1800LTT**  
**Passband 0 to 1800 MHz**



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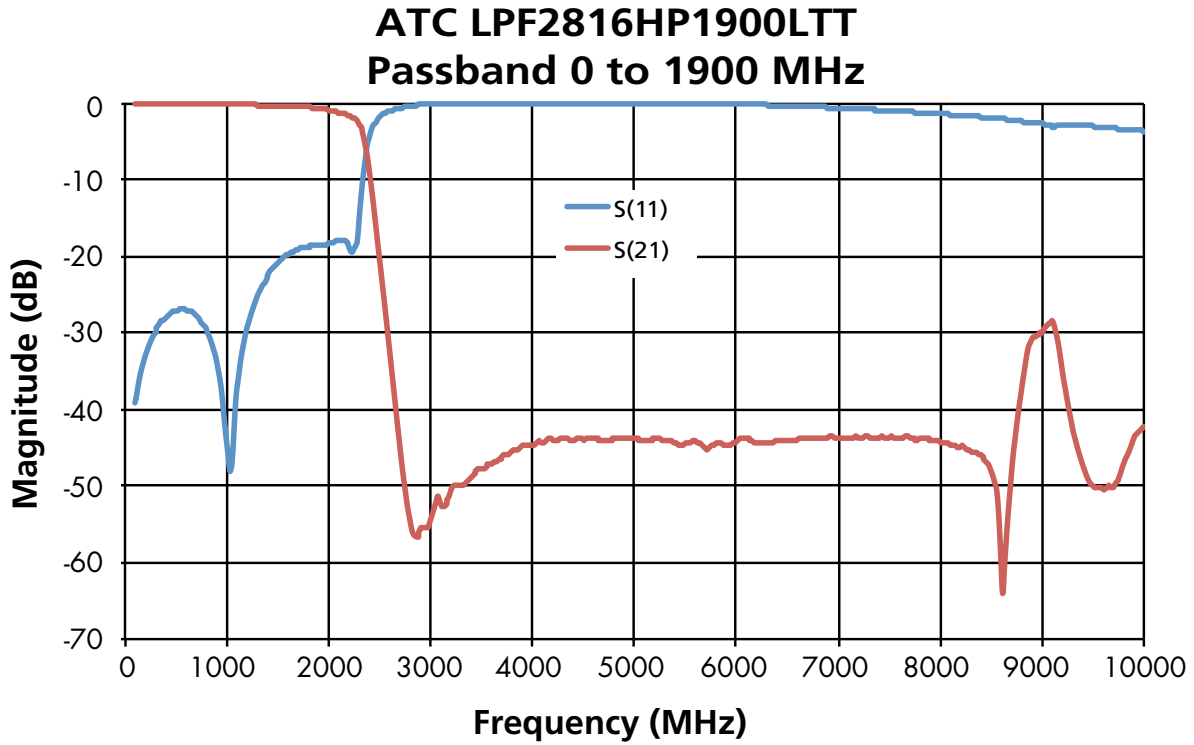
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