

L1L2F Passive Filter

Technical Product Data

Features

- L1 & L2 GNSS Bands
- Excellent Out of Band Rejection
- Passes DC for Active Antennas



Description

Designed with the thin link margins of satellite navigation systems in mind, the L1L2F is a single input L1 L2 Band Passive Filter that passes only the L1 and L2 GPS frequencies. The device features excellent side band rejection with an insertion loss of less than 5dB. The product may pass DC or can also be used as a DC block.

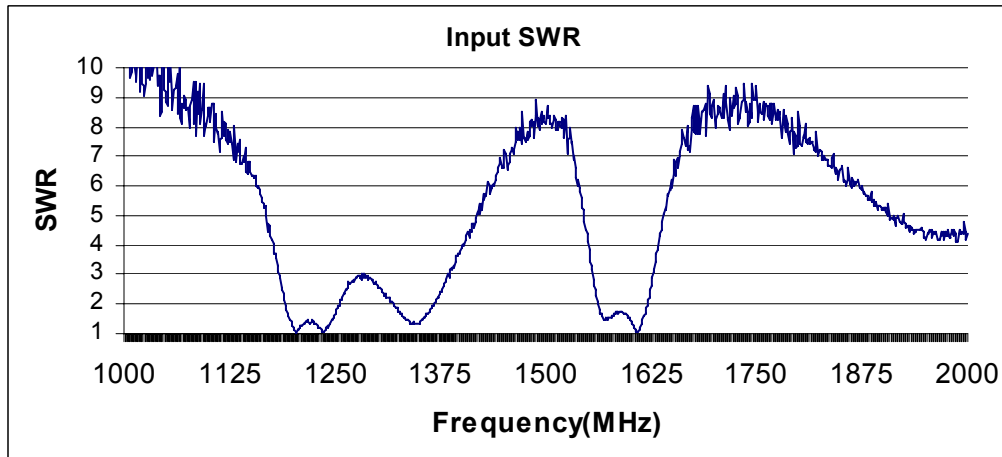
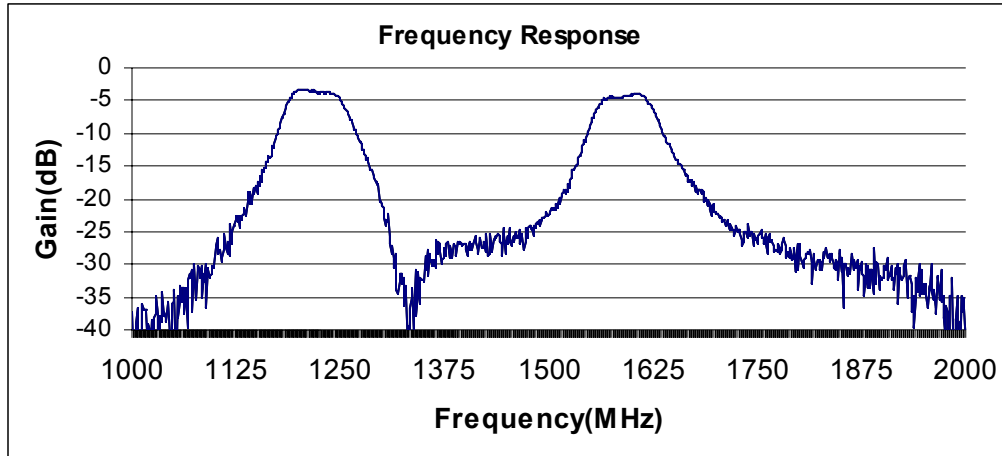
The L1L2F Passive Filter comes with many available options to meet your specific needs. Please call, fax, email (sales@gpssource.com), or visit our website (www.gpssource.com) for further information on product options & specifications.

Electrical Specifications, Operating Temperature -40 to 85⁰ C

| Parameter | | Conditions | Min | Typ | Max | Units |
|--|---------|---|--------------------------|------------|----------------|-------|
| Freq. Range: 1227.6MHz 1575.4MHz | | IN – OUT, IN/OUT-50Ω | 1.185 1.555 | | 1.250 1.625 | GHz |
| In/Out Imped. | | IN, OUT | | 50 | | Ω |
| Insertion Loss 1227MHz 1575MHz | | IN – OUT, IN/OU-50Ω | 3 4 | 3.5 4.5 | 5 5 | dB |
| Rejection 1227MHz 1575MHz | | IN – OUT, IN/OUT-50Ω; +/- 75MHz +/- 100MHz +/- 75MHz +/- 100MHz | -16 -20 -12 -16 | | | dB |
| Input SWR | | OUT Port - 50Ω | | | 2.0:1 | - |
| Output SWR | | IN Port - 50Ω | | | 2.0:1 | - |
| DC IN | Pass DC | DC Input on OUT port | 3 | | 16 | VDC |
| Device Current | | Current Consumption of device, excludes Ant. Cur. | | | 38 | mA |
| Ant/Thru Current | Pass DC | DC Input on OUT port | | | 250 | mA |
| Max RF Input | | Max RF input without damage | | | 30 | dBm |

Performance Data:

L1L2F Passive Filter



Available Options:

| Power Supply Options: | | |
|---|-------------------------------------|--|
| Source Voltage Options | Voltage Input | Type |
| | 110 VAC | Wall Mount Transformer |
| | 220 VAC | Wall Mount Transformer |
| | 240 VAC (U.K.) | Wall Mount Transformer |
| | DC 5-28 VDC | Military Style Connector or w/Quick Connects |
| Output Voltage Options⁽¹⁾ | DC Voltage Out⁽²⁾ | |
| | 3.3 | |
| | 5 | |
| | 7.5 | |
| | 9 | |
| | 12 | |
| | Variable (3-12V) | |
| Custom | | |
| RF Connector Options: | | |
| Connector Options | Connector Type | Limitations |
| | N (Male & Female) | |
| | SMA (Male & Female) | |
| | TNC (Male & Female) | |
| | SMB (Female) | |
| | SMC (Female) | |
| | MCX (Female) | |
| | BNC (Male & Female) | Performance Not Guaranteed |
| Housing Options: | | |
| Housings | Housing Type | Limitations |
| | Standard | None |
| Port Options: | | |
| Pass DC ⁽¹⁾ | IN Port Passes DC | |
| DC Blocked ⁽¹⁾ | IN Port Blocks DC | |

Notes:

1. With Powered Option, any or all RF ports (input or output) can be DC Blocked or can pass the powered DC voltage
2. Maximum combined DC current draw out all ports of the device is a function of the DC input voltage and desired DC output voltage , according to the following:

$$I_{out} \leq 1.4 / (V_{DC IN} - V_{DC OUT}) - 0.007 \quad \text{Amps (or 250mA max)}$$

For powered option with a wall mount transformer (Voltage Input = 110/220/240 VAC), $V_{DC IN}$ is 9V.



Part Number:

Part Number:

L1L2F – P110 / 5 – SF

Product:
Standard

Source Voltage: _____
P110 – Transformer,
P220 – Transformer,
P240 – Transformer,
PDC – DC w/Quick Connects
PM – Military Connector (User supplies DC)

Output Voltage: _____
3.3, 5, 7.5, 9, 12, XX, V – Denotes Output Voltage
(XX – custom output voltage, V – variable)

Connector Options: _____
NM – N, Male
NF – N, Female
SM – SMA, Male
SF – SMA, Female
TM – TNC, Male
TF – TNC, Female
BM – BNC, Male
BF – BNC, Female
SB – SMB Jack, Female
SC – SMC Jack, Female
MX – MCX Jack, Female

For help in creating the part number to meet your exact needs, contact us at Sales@gpssource.com or visit our website at www.gpssource.com.

Mechanical Specifications

