

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.

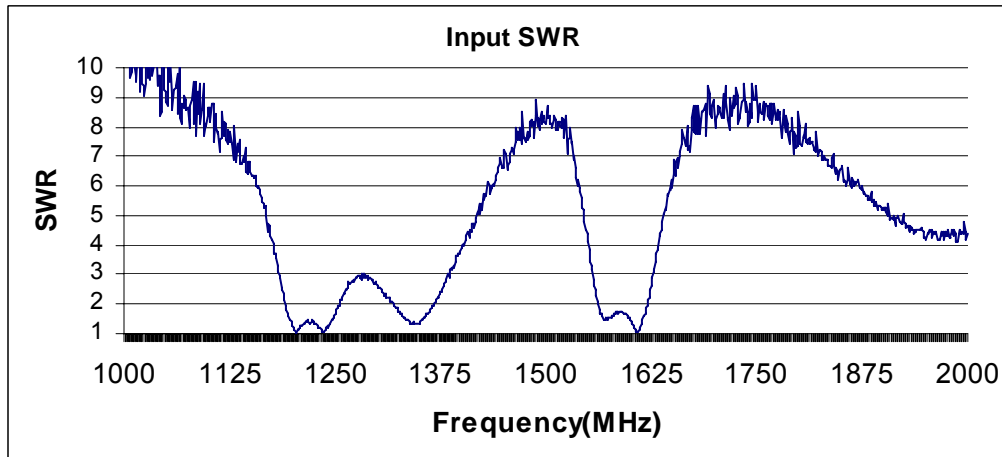
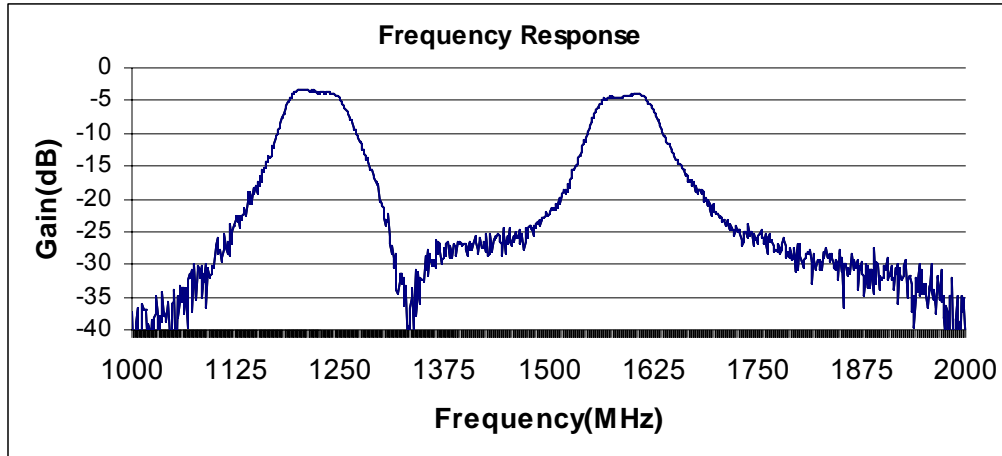
The L1L2F Passive Filter comes with many available options to meet your specific needs. Please call, fax, email (sales@gpssource.com), or visit our website (www.gpssource.com) for further information on product options & specifications.

Electrical Specifications, Operating Temperature -40 to 85⁰C

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.

