

GPS L1 & L2 Band LNA Module

Features

- GPS L1 and L2 bands
- Low noise figure
- Input over drive protection
- Test mode
- Small size

Electrical Specifications¹: (at +25 °C)

Index	Testing Item	Symbol	Test Constraint	MIN	Typ	MAX	Unit
1	Input Power	Pin	L ₁ or L ₂ Band	-140		IP _{1dB}	dBm
2	Gain	S ₂₁	L ₁ or L ₂ Band	29	32	35	dB
3	Gain Variation	ΔG	L ₁ or L ₂ Band	-1	0	+1	dB
4	Out of Band Rejection	S ₂₁	50 - 1100 MHz			-30	dBc
			1375 - 1450 MHz			-30	dBc
			2000 - 11000 MHz			-40	dBc
			11000 - 18000 MHz			-30	dBc
5	Noise figure	NF	L ₁ or L ₂ Band		3.3	4.0	dB
6	Input P _{1dB}	IP _{1dB}	L ₁ or L ₂ Band	-20	-15		dBm
7	Output IP ₃ Level	IMD ₃	L ₁ or L ₂ Band, -50 dBm input power per tone			-75	dBm
8	Interfering Signal Survivability	P _{in,max}	Average, 200 - 18000 MHz	30			dBm
			Pulse, 7 uS, 0.1% duty cycle, 1100 - 1500 MHz	50			dBm
9	VSWR	SWR ₁ , SWR ₂	L ₁ or L ₂ Band			1.8:1	
10	Current Consumption	I _{dd}	V _{dd} = +3.3 V		73	80	mA
11	Power Supply Voltage	V _{dd}		+3.0	+3.3	+3.6	V
12	Operating Temperature	T _o		-40		+85	°C

Notes:

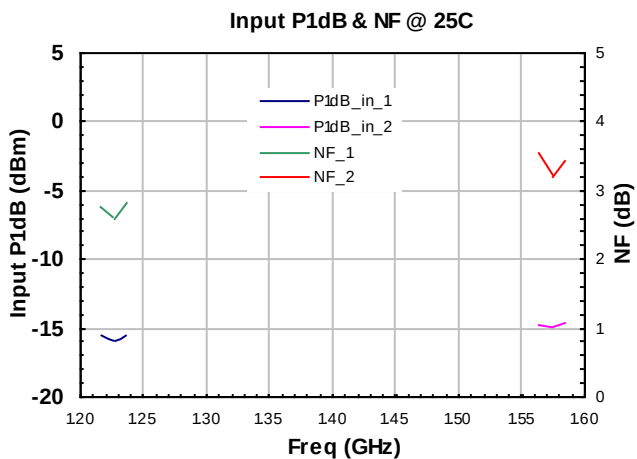
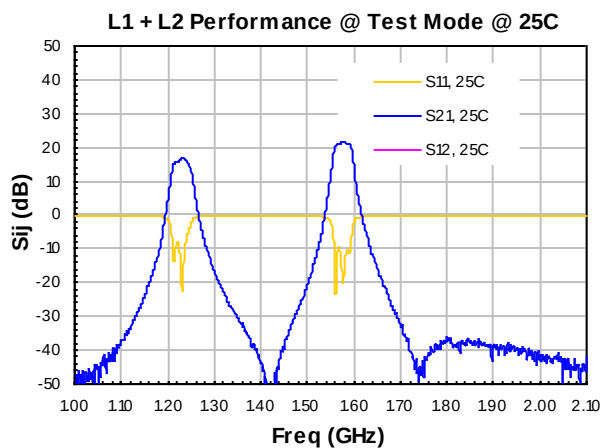
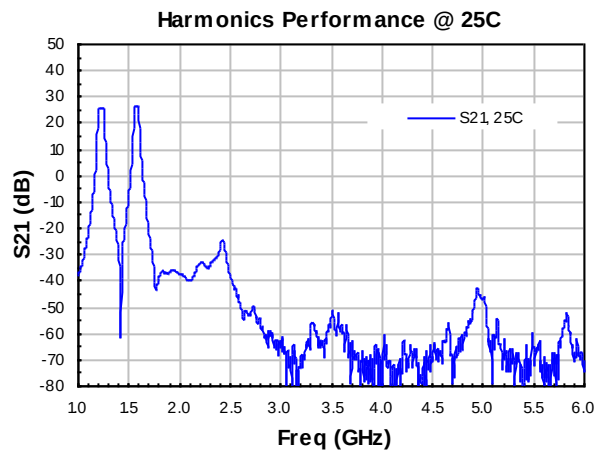
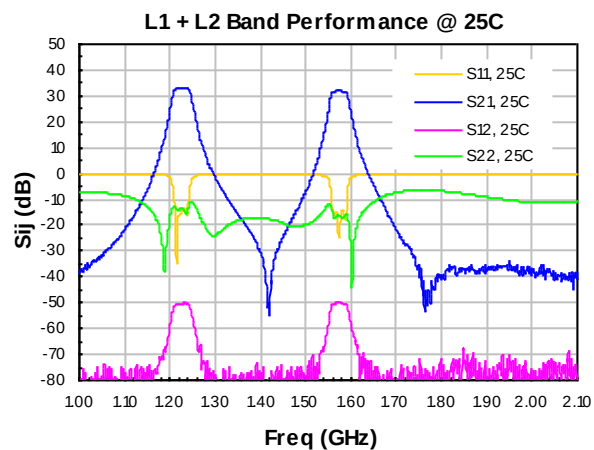
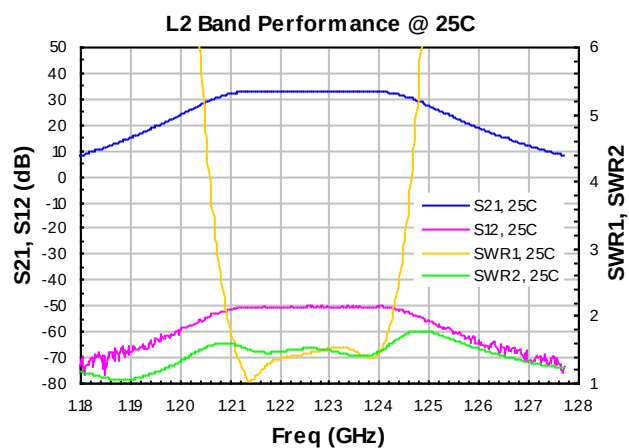
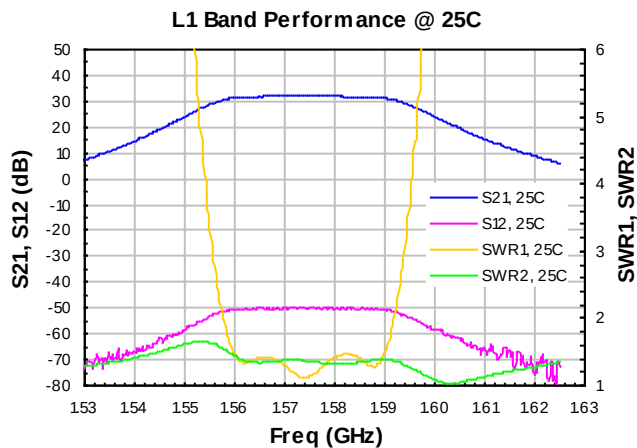
In-band frequency range:

L₁: 1216 - 1238 MHz

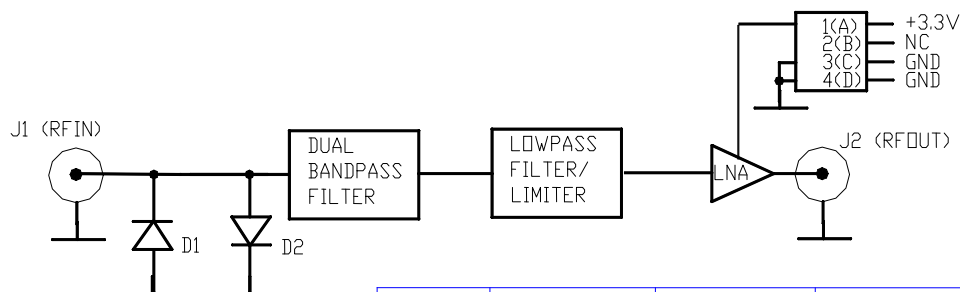
L₂: 1564 - 1586 MHz

¹ Specifications are subject to change without notice.

Frequency Response



Block Diagram

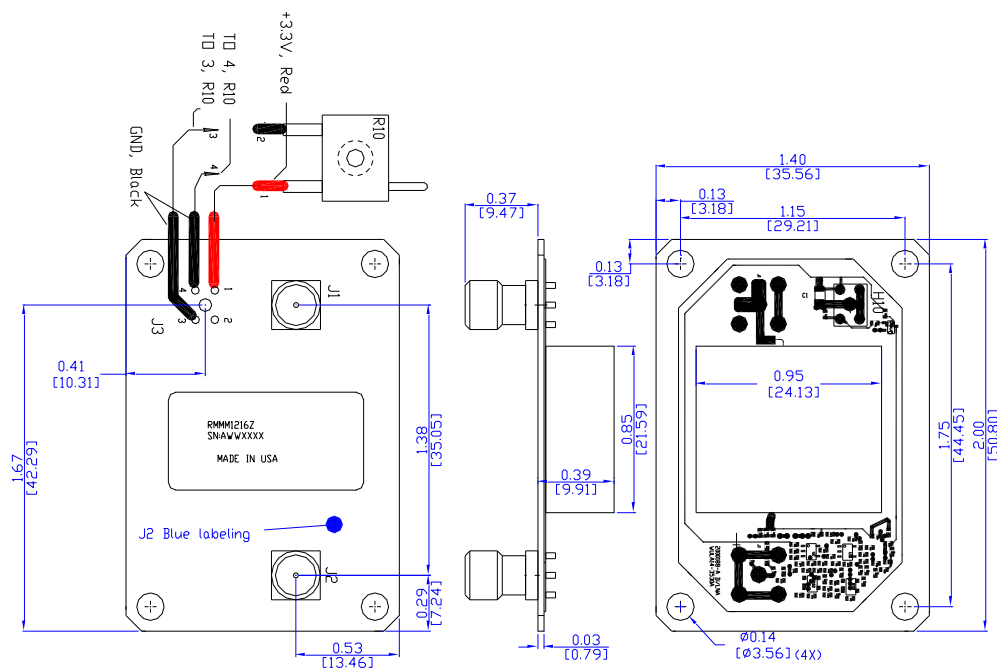


NOTES

1. J1: RF INPUT, SMA FEMALE
2. J2: RF OUTPUT, SMA FEMALE

Pin	1	2	3, 4
FUNCTION	+3.3VDC IN	NC	GND

Mechanical Outline



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