

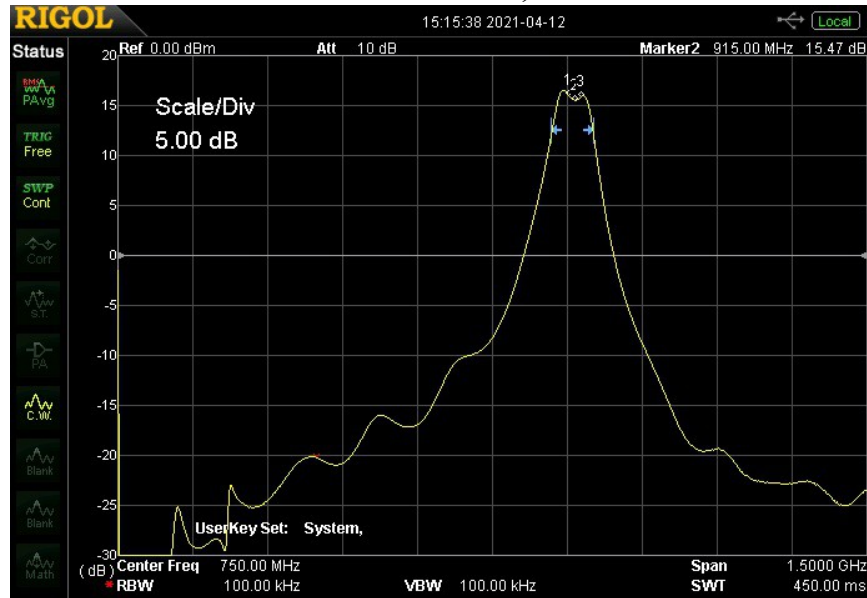


Model 33-LNA 33 cm Pre-Amplifier

The KH6HTV VIDEO Model 33-LNA is a low noise Pre-Amplifier for the 33 cm (902-928MHz) amateur radio band. The typical noise figure is 0.7 dB with a gain of 16 dB. This amplifier has decent return loss on both input and output. It is also stable under widely varying antenna impedances.



Available options: (1) DC powered via output coax connector (2) It can be supplied tuned to any center frequency from 800 MHz to 1.5 GHz including 23 cm band. For 23cm, order as 23-LNA. *Note: the 23-LNA is the replacement for the discontinued 23-4LNA which used a now obsolete, MMIC.*

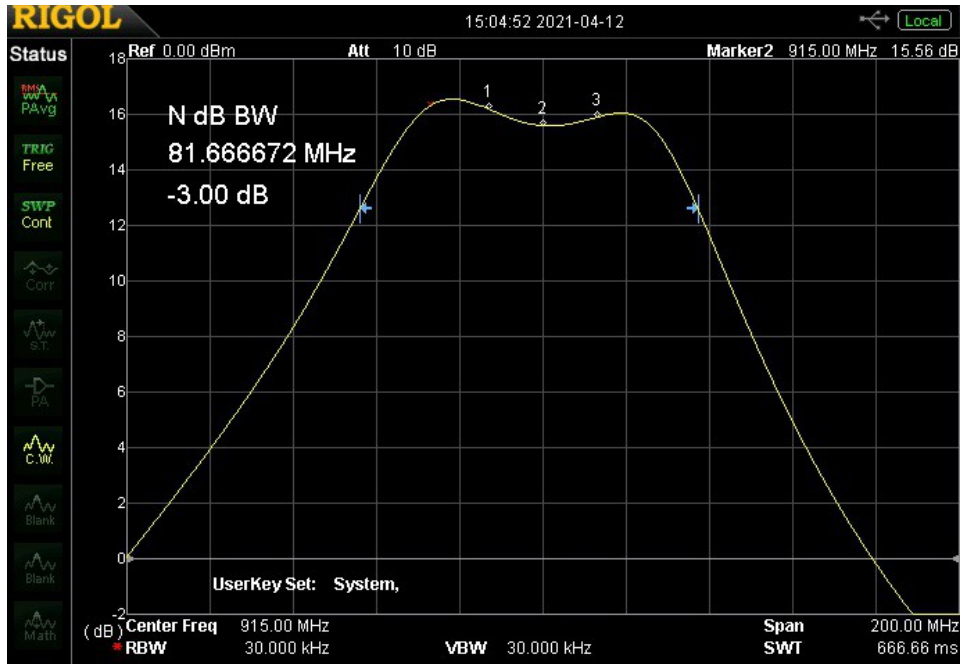


Gain, S21 vs. Frequency -- sweep 0 to 1.5GHz, 5 dB/div & 150 MHz/div.

PARAMETER	Typical Performance	Notes
Frequency Range	902-928 MHz	33cm amateur radio band
Noise Figure	0.7 dB, typical	
Gain, S21	16 dB	see plot, p. 2
Bandwidth	80 MHz	-3 dB
Max. Output Power	+20 dBm	at -1 dB gain compression
Input Return Loss, S11	-10 dB	see plot, p. 2
Output Return Loss, S22	-7 dB	see plot, p. 2
DC Supply Voltage	+12 Vdc, nominal at 95 mA	+11 to +15 V range
RF Connectors	SMA (f)	
DC Power Connector	Feed-Thru, By-Pass Capacitor	Optional -- DC feed via RF output
Dimensions	1.5" x 3.6" x 1.25"	fully shielded, die-cast enclosure

Test Report Furnished --- includes Noise Figure & S parameters

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33cm Gain, S21 vs. Frequency

center frequency = 915 MHz, 200 MHz span, 2dB/div & 20MHz/div,
Pin = -20dBm, makers 1 & 3 are the band edges at 902 & 928 MHz



33cm Return Loss, Input S11 (yellow) & Output S22 (magenta) vs. Frequency

center frequency = 915 MHz, 200 MHz span, 5dB/div & 20MHz/div,
Pin = -10dBm, makers 1 & 3 are the band edges at 902 & 928 MHz

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