



## Model WB-LNA-X Wide-Band, Low Noise AMPLIFIERS



The **NEW** KH6HTV VIDEO Model WB-LNA-X is a line of Wide-Band , Low Noise Amplifiers with a useful frequency response covering the lower microwave frequencies from 0.9 to 5.8 GHz. They include a sharp cut-off, high-pass filter to severely attenuate signals below 350 MHz.

PARAMETER (*)	WB-LNA-1	WB-LNA-2
device used	SPF-5043Z	GALI-39
useful LNA freq. range	0.42 - 3.5 GHz	0.9 - 5.8 GHz
Noise Figure	1.8dB (0.43GHz) 0.99dB (0.9GHz) 0.96dB (1.3GHz) 1.5dB (2.4GHz) 1.7dB (3.4GHz)	5dB (0.43GHz) 2.7dB (0.9GHz) 2.5dB (1.3GHz) 2.5dB (2.4GHz) 3.2dB (3.4GHz) 3.0dB (5.8GHz)
S21 Gain	18dB (0.43GHz) 16dB (0.9GHz) 15dB (1.3GHz) 9dB (2.4GHz) 7dB (3.4GHz)	21dB (0.43GHz) 21dB (0.9GHz) 20dB (1.3GHz) 18dB (2.4GHz) 16dB (3.4GHz) 11dB (5.8GHz)
Pout(-1dB)	+15.5 dBm	+12 dBm
Psat	18 dBm	+13.5 dBm
Low Frequency Cut-Off	335 MHz (-3dB) 300 MHz (-10dB) 250MHz (-20dB)	335 MHz (-3dB) 310 MHz (-10dB) 265 MHz (-20dB)
S11 Input Return Loss	15 dB	20 dB
S22 Output Return Loss	15 dB	20 dB
S12 Isolation	-18 dB	-25 dB
DC Current @ 12 Vdc	55 mA	45 mA
DC Supply Voltage	12 Vdc, +11 to +15 V range, internal voltage regulators	
RF & DC Connectors	SMA jacks (female) DC = solder terminal on feed-thru capacitor	
Dimension	1.5" x 3.6" x 1.25" fully shielded, die-cast enclosure	

(\*) Contact us for additional performance data.

**KH6HTV-VIDEO** [www.kh6htv.com](http://www.kh6htv.com) e-mail: [kh6htv@arrl.net](mailto:kh6htv@arrl.net)

Maui, Hawaii & Boulder, Colorado, USA