



**Blue Tops RF Modules > Low Noise Broadband Amplifier**

**Features:**

- Frequencies to 12 GHz
- Characterized Phase Noise
- Integral Attenuators

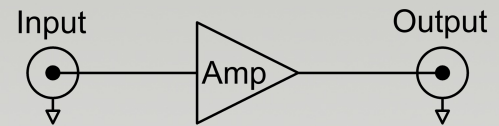
**Applications:**

- Low Phase Noise Amplification
- Broadband Amplification

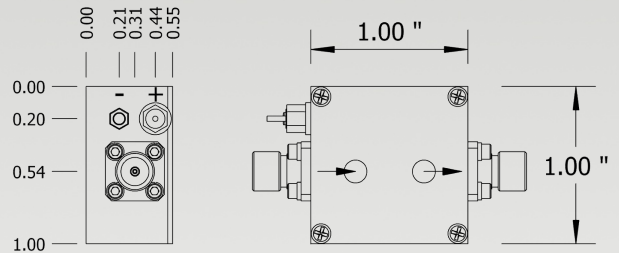


**Description:**

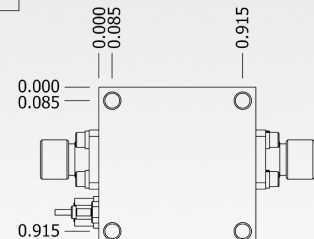
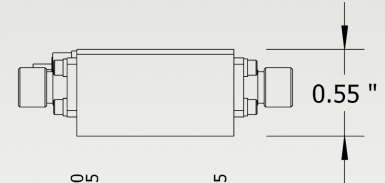
The LNBA2 is a broadband amplifier that is characterized to a specific customer specified frequency within the operating band. A wide selection of common amplifiers and input/output attenuators provide flexibility in configuring gain and input/output levels (see amplifier selection table for options). Residual phase noise is verified at 100 MHz unless otherwise specified. Please consult our technical staff for assistance in configuring an amplifier to suit your input and output requirements.



Electrical Specifications	
Input Frequency Range	to 12 GHz
Gain	to 18 dB
Output Power (P1dB)	to +20 dBm (±1 dB)
Input/Output Impedance	50 ohms
VSWR	≤ 2.0:1
Phase Noise Floor (Intrinsic, Input Referred)	As low as -170 dBc/Hz
Harmonics	≤ -25 dBc, typical
Spurious (Excluding Supply Line Related Spurs)	≤ -80 dBc
Supply Voltage	+ 8, +10, +12 or +15 VDC (±2%)
Current Draw (Amplifier Dependent)	30 to 200 mA
Operating Temperature	0 to +50°C
Storage Temperature	-40 to +85°C
Mechanical	
Dimensions	1" x 1" x 0.55"
DC Supply	Feed Thru Capacitors
Ground	Turret Terminal
RF Input / Output	SMA female *
<b>NOTE:</b> See amplifier selection table for your preferred amplifier specifications.	
* SMA female connectors are used unless otherwise specified. Other options include SMA male, right angle SMAs and others. Contact factory for custom configurations.	



Connector	Function
	RF Input
	RF Output
	Supply Voltage
	Ground, Case

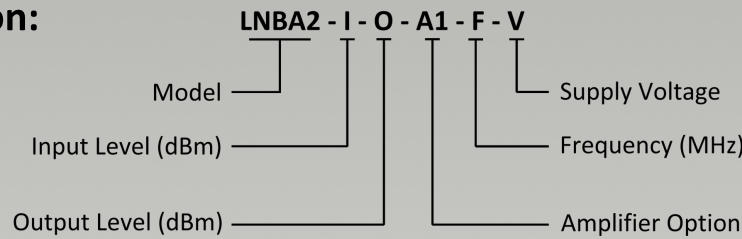


#2-56 x 0.150" deep, Threaded Insert, 4 places



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**Ordering Information:**



Standard P/N **	Input Level	Output Level	Specified Frequency of Operation	Residual Phase Noise Floor	Supply Voltage
<b>LNBA2-0-10-BL-10000-15</b>	0 dBm	+10 dBm	10 GHz	≤ -168 dBc/Hz	+15 VDC
<b>LNBA2-6-18-BR-4000-12</b>	+6 dBm	+18 dBm	4 GHz	≤ -175 dBc/Hz	+12 VDC
<b>LNBA2-3-16-BT-4000-8</b>	+3 dBm	+16 dBm	4 GHz	≤ -170 dBc/Hz	+8 VDC
<b>LNBA2-(-6)-18-CZ-5000-5</b>	-6 dBm	+18 dBm	5 GHz	≤ -170 dBc/Hz	+5 VDC
<b>LNBA2-0-18-DJ-12000-5</b>	0 dBm	+18 dBm	12 GHz	≤ -165 dBc/Hz	+5 VDC
<b>LNBA2-4-14-DK-5000-5</b>	+4 dBm	+14 dBm	5 GHz	≤ -170 dBc/Hz	+5 VDC

\*\* These part numbers are a few common configurations. Use the Ordering Information guide and the [Amplifier Selection Table](#) for additional amplifier options or consult the factory for assistance.

**Standard Amplifier Options:**

Amplifier ***	Frequency Range		Gain (dB)		P1dB (dBm)		Input Referred Residual Phase Noise (dBc/Hz), typical				Supply Voltage (VDC)	Current Draw (mA)
	Min.	Max.	Min.	Max.	Min.	Max.	100 Hz	1 kHz	10 kHz	100 kHz		
<b>AB</b>	DC	4 GHz	16	20	16	18	-155	-165	-170	-170	+5, +8, +10, +12 or +15	65
<b>BJ</b>	DC	8 GHz	12	16	12	14	-150	-160	-168	-168	+5, +8, +10, +12 or +15	50
<b>BL</b>	DC	12 GHz	9	13	12	15	-150	-160	-168	-168	+5, +8, +10, +12 or +15	50
<b>BR</b>	DC	4 GHz	12	13	18	20	-158	-168	-175	-175	+8, +10, +12 or +15	95
<b>BT</b>	DC	4 GHz	13	18	16	18	-155	-165	-170	-170	+5, +8, +10, +12 or +15	65
<b>CT</b>	DC	4 GHz	9	10	14	16	-155	-165	-170	-170	+5, +8, +10, +12 or +15	70
<b>CZ</b>	DC	6 GHz	23	25	17	19	-155	-165	-170	-170	+8, +10, +12 or +15	80
<b>DF</b>	DC	6 GHz	22	25	19	21	-155	-165	-170	-170	+8, +10, +12 or +15	100
<b>DG</b>	DC	4 GHz	15	17	11	13	-155	-165	-170	-170	+5, +8, +10, +12 or +15	50
<b>DH</b>	6 GHz	18 GHz	15	17	18	20	-145	-155	-165	-165	+5, +8, +10, +12 or +15	90
<b>DJ</b>	5 GHz	20 GHz	17	19	17	19	-145	-155	-165	-165	+5, +8, +10, +12 or +15	115
<b>DK</b>	DC	5 GHz	10	11	14	16	-155	-165	-170	-170	+5, +8, +10, +12 or +15	85
<b>DN</b>	DC	7 GHz	17	19	8	10	-155	-165	-170	-170	+5, +8, +10, +12 or +15	55
<b>DQ</b>	DC	4 GHz	10	11	15	17	-155	-165	-170	-170	+5, +8, +10, +12 or +15	65

\*\*\* See the complete [Amplifier Selection Table](#) for additional amplifier options.