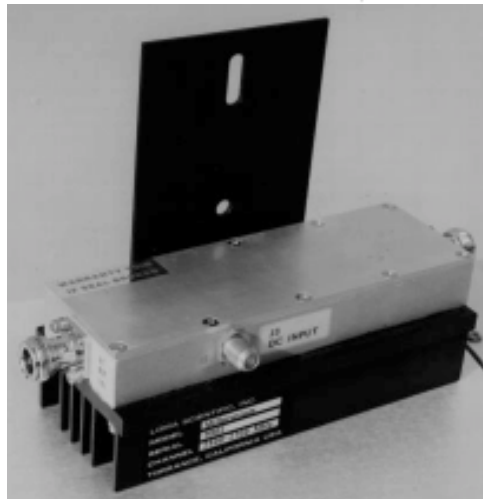
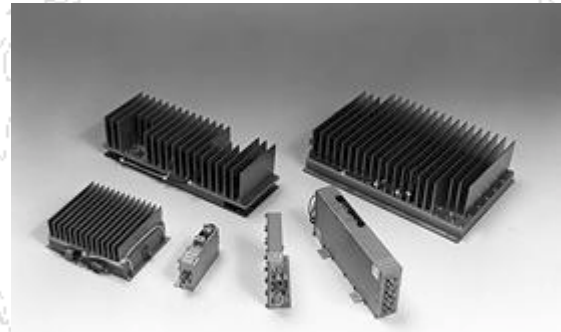


Wireless Broadband Power Amplifiers - WBA Broadcast Series

This family of GaAs FET power amplifiers provide minimum rated linear output powers over 200 to 300 MHz nominal bandwidths from 1.3 to 2.7 GHz. Because of their "Class-A" mode of operation and exceptional intermodulation performance, these amplifiers will provide premium system performance when used as the output amplifier in digital or analog transmitter service. Excellent linearity, high gain and wide dynamic range are achieved along with long term reliability and high efficiency by employing advanced broadband matching networks and combining techniques. Each unit undergoes extensive burn-in prior to final test and inspection.

Features

- Solid State GaAs Field Effect Transistors
- Frequency ranges from 1.3 GHz to 2.7 GHz
- High power output - wide dynamic range
- "Class-A" biasing
- Excellent linearity - very low distortion
- Single voltage +12VDC input supply
- Internal power supply sequencing



Applications

- General purpose power and gain requirements
- Digital radio links
- Wireless Local Loop (WLL)
- PCS, GSM, 2.5G and 3G Base Stations
- Broadcast microwave transmitters and repeaters
- 2.4 GHz ISM Applications
- WLAN Applications
- Lab and equipment testing

Electrical and Environmental Characteristics

Input / Output Impedance:	50 Ohm
DC Input:	+12VDC
Load VSWR:	Open or Short, all Phases
Harmonics:	-20dBc typical at 1dB compression
Spurious Signals:	< -60dBc
Class of Operation:	A linear
Connectors Input/Output:	SMA or N-type female
Operating temperature:	0°C to +50°C
Altitude:	10,000 feet
Humidity:	95% relative without condensation (1.3W unit available in outdoor case - 100% condensing)

Loma Scientific WBA Broadband Power Amplifiers

Specifications @ T = 25degC

Model - Dash Number	Frequency GHz	Pout P1dB dBm	Gain * dB min	Gain Flatness dB max	N.F. dB max	IP3 dBm	Input Bias VDC, amps nom	Case Size **
WBA1315 - 1	1.3~1.5	31	40	+/- 1.0	4	43	+12, 0.5	6" x 2" x .9"
WBA1315 - 10	1.3~1.5	39	40	+/- 1.0	4	51	+12, 4	8" x 4" x 1.25"
WBA1315 - 20	1.3~1.5	42	40	+/- 1.0	4	54	+12, 7	10" x 4" x 1.25"
WBA1315 - 40	1.3~1.5	45	43	+/- 1.0	6	57	+12, 11	10" x 4" x 1.25"
WBA1315 - 60	1.3~1.5	46	45	+/- 1.0	6	58	+12, 16	10" x 6.5" x 1.25"
WBA1315 - 80	1.3~1.5	48	47	+/- 1.0	6	60	+12, 24	11" x 9" x 1.25"
WBA1315 - 100	1.3~1.5	49	50	+/- 1.0	6	62	+12, 32	11" x 9" x 1.25"
WBA1517 - 1	1.5~1.7	31	40	+/- 1.0	4	43	+12, 0.5	6" x 2" x .9"
WBA1517 - 10	1.5~1.7	39	40	+/- 1.0	4	51	+12, 4	8" x 4" x 1.25"
WBA1517 - 20	1.5~1.7	42	40	+/- 1.0	4	54	+12, 7	10" x 4" x 1.25"
WBA1517 - 40	1.5~1.7	45	43	+/- 1.0	6	57	+12, 11	10" x 4" x 1.25"
WBA1517 - 60	1.5~1.7	46	45	+/- 1.0	6	58	+12, 16	10" x 6.5" x 1.25"
WBA1517 - 80	1.5~1.7	48	47	+/- 1.0	6	60	+12, 24	11" x 9" x 1.25"
WBA1517 - 100	1.5~1.7	49	50	+/- 1.0	6	62	+12, 32	11" x 9" x 1.25"
WBA1720 - 1	1.7~2.0	31	40	+/- 1.0	4	43	+12, 0.5	6" x 2" x .9"
WBA1720 - 10	1.7~2.0	39	40	+/- 1.0	4	51	+12, 4	8" x 4" x 1.25"
WBA1720 - 20	1.7~2.0	42	40	+/- 1.0	4	54	+12, 7	10" x 4" x 1.25"
WBA1720 - 40	1.7~2.0	45	43	+/- 1.0	6	57	+12, 11	10" x 4" x 1.25"
WBA1720 - 60	1.7~2.0	46	45	+/- 1.0	6	58	+12, 16	10" x 6.5" x 1.25"
WBA1720 - 80	1.7~2.0	48	47	+/- 1.0	6	60	+12, 24	11" x 9" x 1.25"
WBA1720 - 100	1.7~2.0	49	50	+/- 1.0	6	62	+12, 32	11" x 9" x 1.25"
WBA2023 - 1	2.0~2.3	31	40	+/- 1.0	4	43	+12, 0.5	6" x 2" x .9"
WBA2023 - 10	2.0~2.3	39	40	+/- 1.0	4	51	+12, 4	8" x 4" x 1.25"
WBA2023 - 20	2.0~2.3	42	40	+/- 1.0	4	54	+12, 7	10" x 4" x 1.25"
WBA2023 - 40	2.0~2.3	45	43	+/- 1.0	6	57	+12, 11	10" x 4" x 1.25"
WBA2023 - 60	2.0~2.3	46	45	+/- 1.0	6	58	+12, 16	10" x 6.5" x 1.25"
WBA2023 - 80	2.0~2.3	48	47	+/- 1.0	6	60	+12, 24	11" x 9" x 1.25"
WBA2023 - 100	2.0~2.3	49	50	+/- 1.0	6	62	+12, 32	11" x 9" x 1.25"
WBA2325 - 1	2.3~2.5	31	40	+/- 1.0	4	43	+12, 0.5	6" x 2" x .9"
WBA2325 - 10	2.3~2.5	39	40	+/- 1.0	4	51	+12, 4	8" x 4" x 1.25"
WBA2325 - 20	2.3~2.5	42	40	+/- 1.0	4	54	+12, 7	10" x 4" x 1.25"
WBA2325 - 40	2.3~2.5	45	43	+/- 1.0	6	57	+12, 11	10" x 4" x 1.25"
WBA2325 - 60	2.3~2.5	46	45	+/- 1.0	6	58	+12, 16	10" x 6.5" x 1.25"
WBA2325 - 80	2.3~2.5	48	47	+/- 1.0	6	60	+12, 24	11" x 9" x 1.25"
WBA2325 - 100	2.3~2.5	49	50	+/- 1.0	6	62	+12, 32	11" x 9" x 1.25"
WBA2527 - 1	2.5~2.7	31	40	+/- 1.0	4	43	+12, 0.5	6" x 2" x .9"
WBA2527 - 10	2.5~2.7	39	40	+/- 1.0	4	51	+12, 4	8" x 4" x 1.25"
WBA2527 - 20	2.5~2.7	42	40	+/- 1.0	4	54	+12, 7	10" x 4" x 1.25"
WBA2527 - 40	2.5~2.7	45	43	+/- 1.0	6	57	+12, 11	10" x 4" x 1.25"
WBA2527 - 60	2.5~2.7	46	45	+/- 1.0	6	58	+12, 16	10" x 6.5" x 1.25"
WBA2527 - 80	2.5~2.7	48	47	+/- 1.0	6	60	+12, 24	11" x 9" x 1.25"
WBA2527 - 100	2.5~2.7	49	50	+/- 1.0	6	62	+12, 32	11" x 9" x 1.25"

Notes: * Other gains are available upon request

** Case size does not include heatsink and connectors