

AE TECHRON®

Precision Industrial Amplifiers

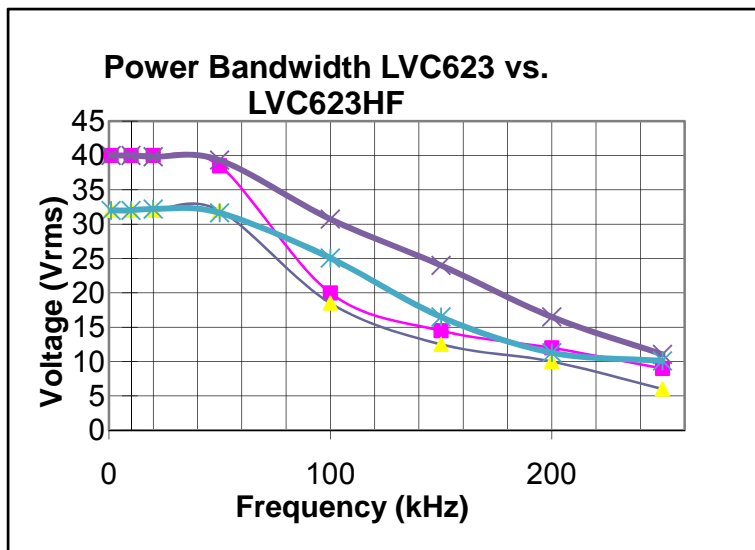
LVC623HF Amplifier Specifications



APPLICATION

The LVC 623HF is a special extended frequency version of our LVC623 linear power amplifier. The LVC623HF will safely drive a wide range of loads from less than 1 ohm to an open circuit. The LVC623HF amplifier works well with continuous or pulse test signals.

The LVC623HF has two (2) separate channels that can be operated independently or combined for greater maximum voltage or current. In bridge-mono mode the available output voltage doubles. In parallel-mono mode the amplifier operates with double the output current.



APPLICATION

The LVC 623HF improves on the already impressive high frequency performance of the LVC623. It provides an improvement of almost 50% in voltage potential between 100 kHz and 150 kHz. To see if this special version of the LVC623 is right for your application contact your AE Techron sales professional.

FEATURES

- > Output of 13.0 amperes rms, or 26 volts rms, per channel into a 2 ohm load
- > Frequency bandwidth of DC to 20 kHz at full power, DC to 250 kHz at reduced voltage
- > Option of controlled voltage, or controlled current operation
- > Remote switching to standby mode by contact closure
- > External monitoring of voltage and current output
- > Equipped with circuitry to protect the amplifier from input overloads, improper output connection (including shorts and improper loads), excessive temperature, voltage or current
- > Shipped ready to operate using single-phase, 120-volt AC mains
- > Installs easily into a standard 19 inch rack, or stands alone for bench top operations

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INDICATORS AND CONTROLS Front

- > Front panel LEDs indicate signal presence and output overload.
- > A pushbutton power "On/Off" located on the front panel.
- > Two gain controls on the front panel for controlled voltage applications.



INDICATORS AND CONTROLS Rear

- > Two circuit breaker resets on the back panel.
- > A back panel slide switch to lift signal ground from chassis ground.
- > A back panel slide switch to choose between 2 channel, bridge mono and parallel mono operation.



PERFORMANCE

(One hour continuous ratings)

Frequency Response

+/- 0.1 dB from DC to 20 kHz at 1 watt.

Phase Response

+/- 10 Degrees 10 Hz to 20 kHz at 1 watt.

Signal-to-noise ratio

At 26 dB gain, better than 105 dB (A-weighted) below full output.

THD

Less than 0.05% from 20 Hz to 1 kHz increasing linearly to 0.1% at 20 kHz at full output.

I.M. Distortion

<0.05% from 410 milliwatts to full output at 26dB gain with an 8 ohm load.

Slew Rate

>13V per microsecond.

Load Impedance

Rated for 16, 8, 4, 2 and 1 ohm use. Safe with all load types including reactive loads.

Input Impedance

Greater than 10K ohms, balanced, and 5K ohms unbalanced.

Output Impedance

Less than 10 milliohms in series with less than 2 microhenries.

OUTPUT POWER

One Channel Driven

Ohms	40mSec Burst			1 Hour Continuous		
	Watts	Volts	Amps	Watts	Volts	Amps
2	354	27	13	98	14	7
4	240	31	8	196	28	7
8	148	34	4	145	34	4
16	89	38	2	89	37.8	2

Two Channel Bridged to Mono

Ohms	40mSec Burst			1 Hour Continuous		
	Watts	Volts	Amps	Watts	Volts	Amps
4	538	46.40	12	196	28	7
8	431	58.70	7	392	56	7
16	290	68.10	4	290	58.1	4

Two Channel Paralleled to Mono

Ohms	40mSec Burst			1 Hour Continuous		
	Watts	Volts	Amps	Watts	Volts	Amps
1	520	22.8	23	196	14	14
2	420	29	14	392	28	14
4	290	34	9	289	34	9
8	166	36	5	165	36.3	5



PHYSICAL CHARACTERISTICS

Chassis: The amplifier is designed for stand alone, or rack mounted, operation. The Chassis is black steel with a silver finished aluminum front panel. The unit occupies two EIA 19-inch-wide units.

Weight: 55 lbs. (25 kg), Shipping 66 lbs. (30 kg)

AC Power: Single phase, 120 volts, 60 Hz, 15 amperes ac service.

Cooling: Forced air cooling from the front, through removable filters, to side panels

Dimensions: 19 in. x 16 in. x 3.5 in. (48.3 cm x 40.3.0 cm x 8.9 cm)

SUPPORT

When you purchase an AE Techron amplifier, a full complement of technical and factory support personnel joins your team.

AE Techron provides:

- > Applications engineering for your technical questions and customized product needs.
- > A one year limited warranty to protect your equipment investment.
- > A fully equipped service center to keep your amplifier operating at original performance requirements.