

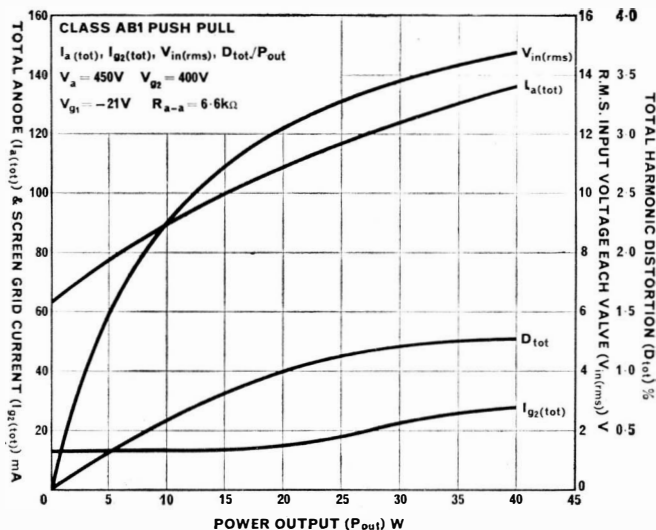
# 40W-Audio

## push pull operation



B 9D (Magnoval) Base

New High Sensitivity Audio Pentode offering high output and low distortion



The Brimar EL506—a new power pentode on a magnoval base—is primarily intended for audio power amplifiers. Two valves in push-pull are capable of producing up to 40 watts, and offer the following features:

1. Only 1.25% distortion occurs in amplifiers without negative feedback when 40 watts is produced by two EL506 valves operating in push-pull with fixed bias.
2. Each valve requires only 0.8A heater current.
3. The high power sensitivity allows 40 watts output for only 30V rms input.

These features will be of interest to designers and manufacturers of either high fidelity audio equipment having considerable feedback, or for direct drive from a carbon microphone for low cost modulators.

**Application Report No. L96** describes the design and performance of the Brimar VA12 high sensitivity, high fidelity 20 watt amplifier, which uses a pair of EL506 valves with auto bias. In this amplifier the EL506 valves are operated in the class AB1 ultra-linear mode with 36dB of negative feedback, whereby less than 0.1% distortion occurs at the full rated output of 20 watts. This report is available on request.



For full technical details, please write to:

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