separated out the capacitors again and left the second channel running from the 500VA toroid. With the two loudspeakers side by side I soldered a couple of mixing resistors across the volume pots to give a mono signal and then faded up and down rapidly between the two channels.

Power output

50-150W RMS depending

Load impedance Supply voltage Input sensitivity (for 100W into 8R)

Distortion (THD) Frequency response Signal-to-noise ratio (CCIR/ARM)

Slew rate Transient output current **Damping factor** (typical at 100Hz)

on supply voltage, load impedance, etc. 4-16R ± 30V to ± 45V

0.775V RMS 0.0009% 5Hz-125kHz

120dB 125V/us

45A peak-to-peak

Table 1 Manufacturers' specification for the Superamp

And? Well yes, there was a difference, but I'm not sure what it was or which of the two sounds I preferred. With a little bit of imagination I could convince myself that the channel with the 500VA toroid sounded better at low frequencies, a little more open, perhaps, a little less mud and confusion. Then I'd play another disc and everything would change.

Perhaps a transformer rating of twice the minimum wasn't enough. Maybe I should have stuck out for a 1000VA model and hung the expense. Then again, it's possible that any differences were being masked by the use of a mono signal and that a full stereo audition would reveal them more clearly. Personally I doubt it, but it would be interesting to be proved wrong on this point.

In Conclusion

The Sage bipolar Superamp modules are clearly worthy of consideration by anyone building a high power, high-quality audio system. In spite of the stern warnings in the instructions the modules seem reasonably tolerant on the layout front and this coupled with their simple power supply requirements must make them a good choice where ease of construction is a major consideration.

I'm not keen on the sort of lash-ups which are all too often found on stage and disco equipment, but if any module is going to survive and sound good in that sort of application I suspect these will. They should also be of interest in domestic audio systems since they offer good quality sound at a not unreasonable price. The set-up used here cost around £170 in total and I suspect you would have to pay a lot more for anything substantially better.

The Superamp bipolar power amplifier module is available from Sage Audio, Construction House, Whitley Street, Bingley, West Yorkshire BD16 4JH, Tel (0274) 568 647. They cost £47.50 each inclusive of VAT and postage. The MOSFET-output SuperMOS modules are currently unavailable but should be on sale again soon. Contact Sage Audio directly for details.

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