

Stabilized power supply ZT15VA

(for Dispre 2 V4 with 70054K transformer, with 70053K transformer for both Dispre 2 V4 and Dispre 2-JFET).

The power supply was designed for one PCB of Dispre II preamplifier. The standard load current is 2 x 60 mA and heatsinks are chosen just for this load current. There was a basic design goal – the power supply to be built in a standard 1U height case (44 mm), therefore a toroidal transformer with mounting height 26.3 mm is used. After introduction of Dispre 2-JFET, the power supply was modified for 70053K transformer, and rated output current increased to 2 x 120mA.

The circuit principle is a well known series regulator with Darlington pass device. Compared to monolithic stabilizers 7815/7915 and 317/337 the ZT15VA has lower noise and better suppression of high frequency interference spectral components.

Specifications

Input voltage	230V / 50Hz
Output voltage	2 x 15V
Rated load current	2 x 60 mA (2 x 120mA with 70053K trafo)
Maximum load current	2 x 250 mA (short time)
Ripple suppression	ripple 100 uV peak approx. at 2 x 60 mA
Dimensions	159 x 64 x 28 mm

Circuit connection

