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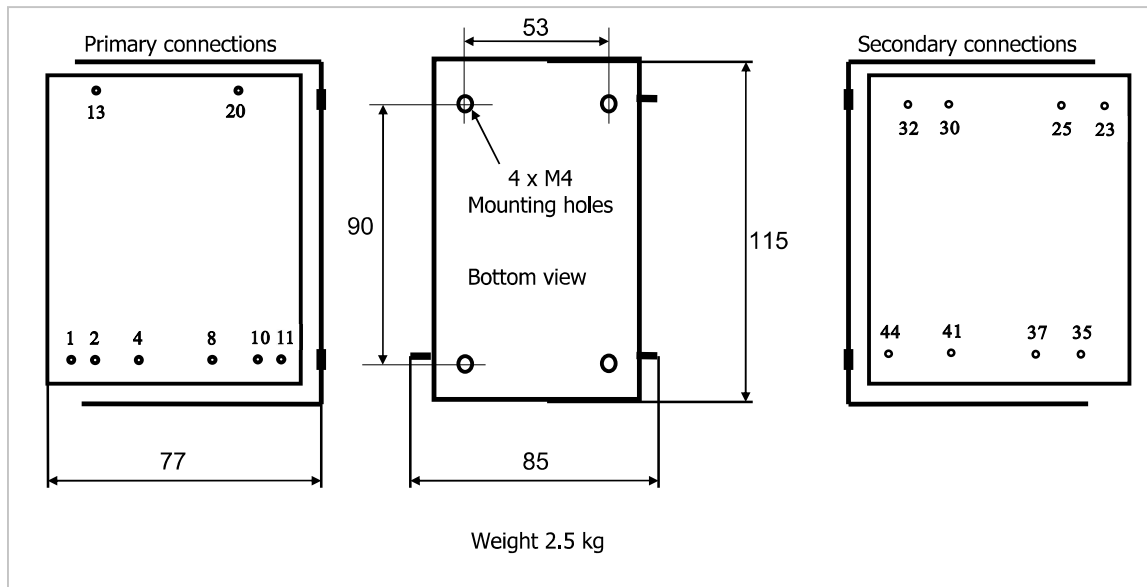
Push-Pull Tube Amplifier Output Transformer

LL3733

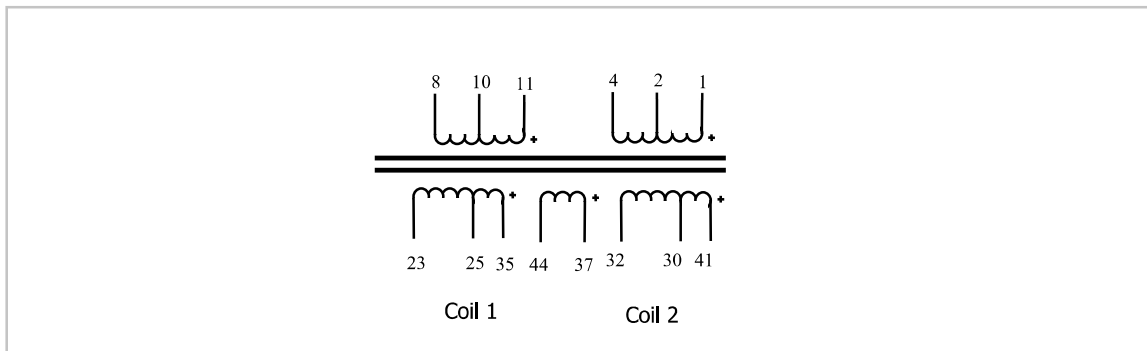
5k : 5, 8 ohm with 50% UL and 2% NFB

The LL3733 is a push-pull tube amplifier output transformer with 50% UL taps and a separate winding for 2% NFB. The transformer is built up from two coils, each consisting of 3 sections, one primary and two secondary sections. The secondary sections are tapped for 5 and 8 ohms load. The windings are arranged to minimize destructive capacitive coupling between primaries and secondaries, and for extremely small phase error between anode and UL tap. The C core is a high-quality grain-oriented silicon steel C-core from our own production.

Physical dimensions, pin and mounting hole layout for LL3733 (all dimensions in mm)



Simplified winding schematics:



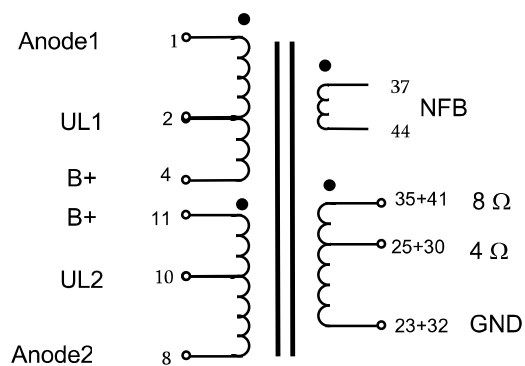
	LL3733
Turns ratio in application	33:1 for 5.4kΩ : 5Ω 25:1 for 5kΩ : 8Ω
UL tap	50% from B+
Feedback winding (split between coils)	2% (50:1)
Static resistance of primary (primary windings in series as indicated below)	250 Ω

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Static resistance of secondary (secondary windings connected as indicated below)	0.3 Ω for GND -- 5 Ω 0.5 Ω for GND -- 8 Ω
Primary Inductance	270H
Primary leakage inductance (primary connected as below, secondary short circuited)	22mH
Max recommended primary DC current through windings (heat dissipation 7W)	170 mA (Max 340mA DC from B+)
Max. primary <u>signal</u> voltage at 30 Hz	850V RMS
Frequency response (source 1.5k, load 8 ohms, ref. 1kHz)	+0 / - 2 dB: 5Hz – 30kHz
Max output power at 30Hz	140W
Signal loss across transformer	1 dB

LL3733 connection for Push-Pull



● indicates phase

