

Tube Amplifier Output Transformer LL2770B (3.1k : 5Ω and 3.2k : 8Ω (B version to match first set of PCBs)

The LL2770B is a tube output transformer primarily designed for 300B tubes in SE applications with cathode feedback. The transformer is built up from two coils, each consisting of 5 sections. The core is a high quality grain oriented silicon steel C-core from our own production.



Winding schematics:



	LL2770B	
Turns ratio (approx.)	50+50+7.3 : 2 x (4 + 2 + 1)	
Static resistance of primary windings 4-3 and 7-8 / 2-6	90 Ω / 12 Ω	
Static resistance of secondary windings 21-31 and 35-15 / 32-33 and 37-37 / 24-34 and 38-18	0.7 Ω / 1.4 Ω /0.3 Ω	
Primary leakage inductance (all in series)	To be measured	
Max recommended primary heating DC current (heat dissipation 7W)	200 mA	
Max. primary <u>signal</u> voltage r.m.s. at 30 Hz (all in series)	Push-Pull 570 V	Single End 252 V

Electrical characteristics

Primary Load Impedance, Max power and power loss.

Primary DC Current Core Air-gap and Pr	<u>imary inductance</u>	
	LL2770/PP	LL2770/60mA
Core Airgap	25 μ	140 µ
(delta/2)		
Single end standing current for 0.9 Tesla		60mA
(recommended operating point)		
Primary inductance	110 H	45H

LL2770 Primary connection for Single-End output stage with cathode feedback



Secondary connection for 3.2k : 8 ohms



Secondary connection for 3.1k : 5 ohms





Tapped connection for 5 and 8 ohms (suggested by Mr. Fujita of Elekit, Japan)