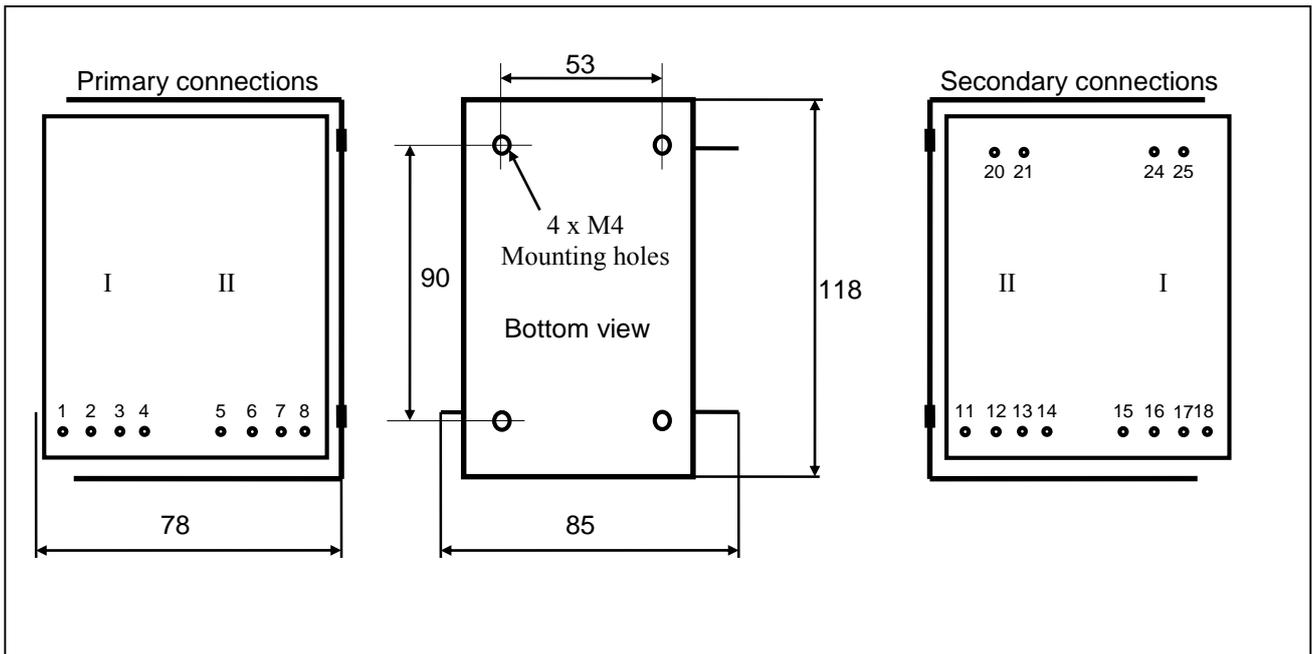


Tube Amplifier Output Transformer LL2752

LL2752 is an output transformer for tube amplifiers, primarily designed for 2k : 8 ohm applications. The LL2752 is available with different core air-gaps for different type of output stages. The transformers are highly sectioned with harmonically sized sections, which results in a minimum leakage inductance. This combined with a low capacitance coil winding technique results in a wide frequency range. The transformers are un-potted, open frame type suitable for mounting inside amplifier housings.

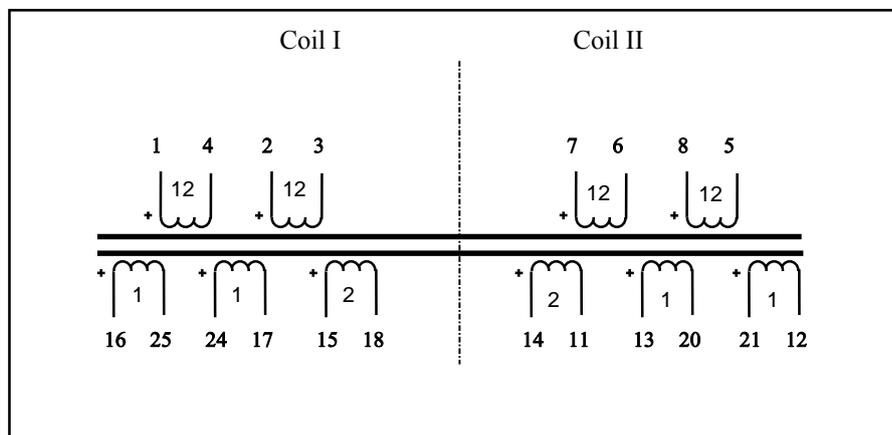
Physical dimensions, pin and mounting hole layout LL2752 (all dimensions in mm)



R150220 PL

Pin spacing module, primary side:	5.08 mm (0.2")
Pin spacing module, secondary side:	7 mm approx..
Row spacing:	75mm approx.
Weight:	2.5 kg
Turns ratio:	12+12+12+12 : 2+ 1+1 +2+1+1
Core type:	Lundahl silicon iron C-core. Also available with amorphous C-core

Winding schematics:



LL2752			
Turns ratio:	12+12+12+12 : 2+ 1+1 +2+1+1		
Static resistance of primary (all in series)	92 Ω (4 x 23 Ω)		
Static resistance of each secondary winding (approx..)	0.7 Ω		
Primary leakage inductance (all in series)	1 mH		
Max recommended primary DC current (heat dissip. 7W)	280 mA		
Max. primary <u>signal</u> voltage r.m.s. at 30 Hz (all in series)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Push-Pull 480V</td> <td style="text-align: center;">Single End 215V</td> </tr> </table>	Push-Pull 480V	Single End 215V
Push-Pull 480V	Single End 215V		

Isolation between primary and secondary windings / between windings and core: 3 kV / 1.5 kV

Electrical characteristics

Primary Load Impedance, Max power and power loss.

	Sec. connection for 4/8/16 Ω (See next page)		
	-B/C	B/C/D	C/D/-
	Primary Load Impedance		
LL2752	4.6 k Ω	2 k Ω	1.2 k Ω
	Power and Loss		
Max. Power, P-P at 30 Hz	45W	105W	180W
Max. Power, S.E. at 30 Hz	10 W	21 W	36W
Power loss across transformer	0.2 dB	0.4 dB	0.7 dB

Primary DC Current Core Air-gap and Primary inductance

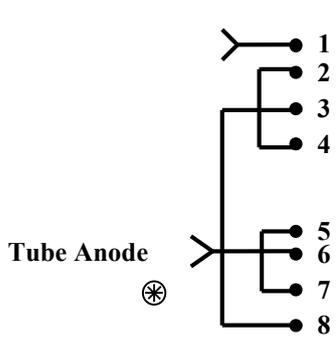
	LL2752/60mA
Core Airgap (delta/2)	100 μ
Single end standing current for 0.9 Tesla (recommended operating point)	60mA
Primary inductance	30H

Frequency response, LL2752/60mA

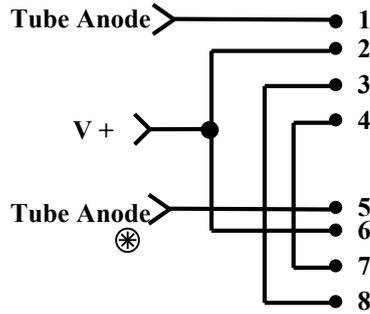
(source impedance 500 Ω , load impedance 10 ohms
Secondary connection "C"

10 Hz – 50 kHz +0/-1 dB

Primary connections, Single-End

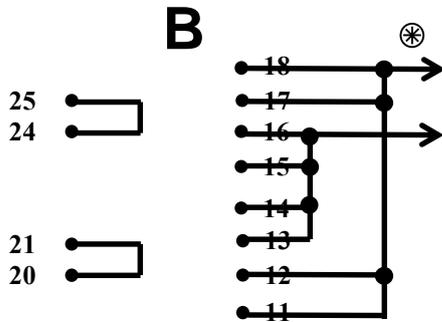


Primary connections push-pull

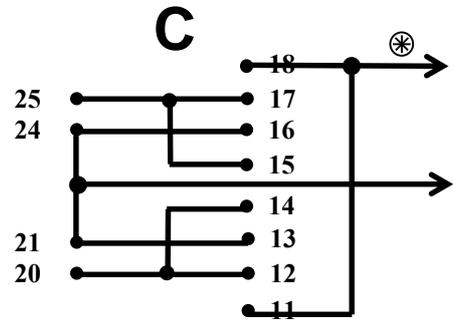


Secondary connections

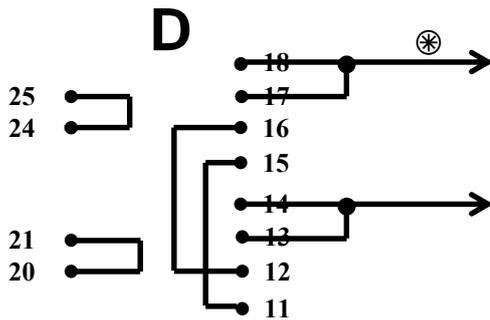
⊗ Indicates phase



Max secondary Voltage RMS @ 30 Hz	
P-P: 19V	SE : 9V
Sec. copper resistance 0.2 Ω	Windings in series 2



Max secondary Voltage RMS @ 30 Hz	
P-P: 29V	SE : 13V
Sec. copper resistance 0.4 Ω	Windings in series 3



Max secondary Voltage RMS @ 30 Hz	
P-P: 38V	SE : 17V
Sec. copper resistance 0.9 Ω	Windings in series 4